

LIFE VALUE CHOICES IN CAREER DECISION MAKING
AS A FUNCTION OF ROLE SALIENCE, AGE, AND SEX
AMONG COMMUNITY COLLEGE STUDENTS

BY

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A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF
THE UNIVERSITY OF FLORIDA IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA
1982

Dedicated to my very special
and loving husband, Joseph Pittle,
and to my parents, Warren and Doris Richmond.

ACKNOWLEDGMENTS

I would like to express my sincere appreciation to the people who helped with this study.

To Dr. Joe Wittmer, chairman of my Supervisory Committee, for his open door, encouraging words, and expert skills in guiding me through the dissertation process. I thank him for sharing his valuable time and energy with me.

Thanks to Dr. Phyllis Meek, whom I feel honored to have worked closely with over these past years. Her strength, kindness, unconditional support and encouragement have motivated me more than I can ever say.

Very special gratitude to Dr. Steve Olejnik, who is patience personified. He is the finest, most caring teacher that I have had the privilege to know. I can only wish to emulate his professionalism and concern for students in my own pursuits as an instructor.

Thanks to Dr. Gary Seiler, a special friend whose trust in my abilities from the beginning has helped to guide me to this point in my career.

Thanks to Dr. E.L. Tolbert whose expertise in his field and willingness to share his time has helped me with this dissertation.

Thanks most certainly are extended to Dean Robert Wheless who taught me innumerable lessons in administration, offered me full use of Santa Fe Community College for my research needs, and most importantly, always trusted my ability to be successful in this field.

Gratitude beyond words goes to Dan Rich who has worked endlessly typing my words as I frantically told him that the deadline was yesterday. He has been a joy to work with.

Most importantly, I wish to express my loving gratitude to my husband, Joseph Pittle, and to my parents, Warren and Doris Richmond, whose incredible patience, support, unending encouragement and pride have truly enabled me to achieve this goal. My appreciation is inexpressible, and I dedicate this work to them.

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Abstract of Dissertation Presented to the Graduate Council
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

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August, 1982

Chairperson: Joseph Wittmer
Major Department: Counselor Education

The main focus of this study was an exploratory data analysis of the contributions made by age, sex, salience and their interactions toward predicting value choice in career decision making among community college students. Value choices were derived from a value scale which asked respondents to rate how important each value was for them. A measure of role salience was derived from a role values instrument which asked respondents to rate the degree to which various roles are used to satisfy values in their lives.

The large sample ($N = 330$) was drawn from a local community college whose population was representative of the

increasing numbers of adult learners participating in today's higher education. Both instruments were administered to students regardless of their age so that an examination of value choice as a function of age would be possible. Regression analysis was used to analyze the results.

The results revealed some important findings that are useful for counselors who work with college students of various ages. In only six of the twenty-one values measured was evidence of a significant relationship between age and value choice found for subjects in this study. Older students rated intrinsic values higher while younger students rated extrinsic values higher. A significant positive relationship between measures of role salience and value choice was found for each of the twenty-one values. The effects of the interactions of age and salience on value choice was also examined. It was found that younger students consistently rate value choices and role salience higher than older students. Implications of these results for counselors who work with community college students of different ages are presented and discussed.

CHAPTER I

INTRODUCTION

The concept of lifelong learning as well as the social, economic, and personal pressure on people to acquire post-secondary education has led to a dramatic rise in the enrollment of adult learners in colleges and universities today. Institutions are greeting these non-traditional students with open arms. The motivation to accept and recruit adult learners is more than a purely altruistic community service. A decrease in the traditional college-age population has increased higher education's dependence upon the adult learner for economic survival. This becomes even more obvious as financial assistance to college students drops and young adults are forced to enter the labor market rather than continue their education beyond high school.

Active recruitment of non-traditional students has been occurring for several years now. Yet, as Perrone, Wolleat, Lee, and Davis (1977) indicate, we still know very little about the educational, vocational, social, and personal needs of the adult learner. Two research studies (Seltz and Collier, 1977; Penn and Weaver, 1979) have shown that while many colleges and universities are willing to welcome adult learners, they have not made the changes necessary to facilitate the adult learner's adjustment to a college

environment oriented to the traditional, seventeen-to-twenty-two year-old student. However, this is changing gradually.

Recognition of the important role that adult learners play in higher education today has led to an increase in research concerning their unique needs. Geisler and Thrush (1975), Heddesheimer (1976), Barbier (1971) and Grabowski (1976) among others have conducted need assessment studies which indicate that career counseling assistance is highly desired by adult college students. The career counseling needs of adults as distinct from traditional college-age students demand more attention. Studies by Herr (1979), Kimmel and Murphy (1976) and Leckie (1978) have defined some differences between traditional and non-traditional students. These differences contribute to the unique career counseling needs of each group. Leckie (1978) offers the summary that 1) adult students are not primarily students, and 2) the classroom is not the focal point of the adult learner's life. Adult learners may also be active in roles such as parents, spouses, and community members.

The multiple role responsibilities which characterize adult learners may significantly affect the way they approach career decision making. As Seltz and Collier (1977) explain, adults present a different set of motivations, influenced by life and work experiences, that lead to their career decisions. The unique emotional, economic, and physical barriers facing adults (Frederickson, Macy, and

Vickers, 1978) contribute to the complications of the career counseling process as well. This study has attempted to examine the value choices in career decision making of community college students of all ages, male and female. Attention focused on the contribution of age, sex, and measures of role salience to value choice. Implications of these findings to the particular needs of adult learners in higher education are presented in Chapter V.

Rationale for the Study

The importance of values in career decision making has been stressed by several prominent theorists (Alvi, 1980-1981; Ginzberg, 1970; Katz, 1969; Pryor, 1979; Rosenberg, 1957; and Super, 1962). Ginzberg (1951, in Katz, 1963) defines values in work as "the foundation for an effective occupational choice. . . which enables one to order current achievement with reference to the future. . . [and find] the effective linking of present action to future objectives" (p.17). Vocational adjustment is measured by the degree to which an occupation satisfies an individual's values. The ability to realize one's values is, therefore, at the heart of successful career decision making. For example, a person who values social contact might find satisfaction in a career which requires public relations; whereas, a person who values autonomy and individuality may be frustrated in a career where conformity to public approval is paramount.

Several studies have examined differences in value choice between different populations. Studies by Morse (1978), Dietrich (1977), Lehman (1968), Drummond and others (1978), and Glogowski and Lanning (1976) have examined value choice differences as a function of age. Many confirmed the finding that older groups tend to have a more intrinsic value orientation than younger groups. That is, there was a shift toward values such as creativity, achievement, and intellectual stimulation over the extrinsic values such as economic returns, security, and lifestyle. Further investigation is required to better understand the effects of age on work value choice.

Another variable which may influence differences by age group in work value choice is role salience. This variable has received little empirical attention. Role salience is defined as the perceived importance of a role in satisfying an individual's values (Greenhaus, 1971). Studies investigating the impact of role salience on vocational adjustment have shown salience to be positively correlated to measures of self-esteem (Korman, 1966); measures of occupational congruence (Greenhaus, 1971; 1973); the degree of need for prestige and achievement (Masih, 1967); and measure of job involvement (Lawler and Hall, 1970). Role salience has been examined as a correlate of vocational decidedness/undecidedness (Greenhaus and Simon, 1977) and as a correlate of work value satisfaction (Super, 1980b).

Theories of vocational adjustment based on value satisfaction have assumed that people have high degrees of career salience, a measure of the importance of the role of work. They assume that the work role is seen by individuals as an important way to satisfy their values. People may, however, differ in their levels of career salience. For example, people who desire autonomy but have careers which do not allow enough autonomy may still be satisfied with their careers if their needs for autonomy are satisfied by participation in a community member role such as an organizer for the League of Women Voters. A person who has a high need for affiliation may satisfy that need or value through friendships and leisure activities, remaining satisfied with a career which is lacking in social contact.

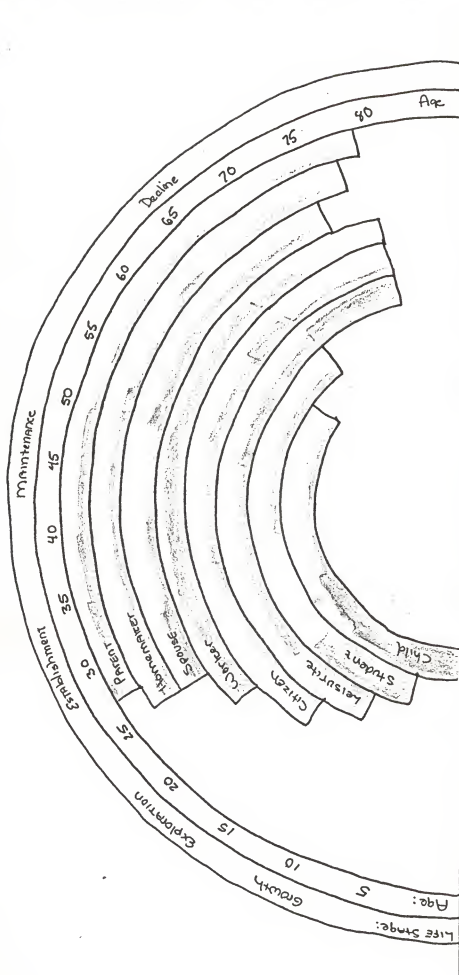
The multiple roles, such as homemaker, worker, student, community member, and leisurite, played by an adult learner, may affect the perceived importance of the role of work to satisfy all values. Super (1980a, and 1980b) offers a theoretical framework for understanding value satisfaction as it relates to multiple role playing. He calls this a "life span, life space approach to career development" (1980, p. 282). Life span describes the entire lifetime from birth to death. Life space describes an overview of the many roles an individual plays throughout a life span. Role salience within a life space is measured by three components: participation, commitment, and value realization. Participation is the objective, behavioral aspect of salience which

measures the time one actually puts into an activity. Commitment is the affective component which measures the emotional involvement one has to an activity. Role-value realization is the third component of salience. This measures the degree to which each value is sought within each role.

The life span, life space approach to career development uses a career rainbow to graphically show the salience of roles for an individual (See Figure 1-1). Throughout the life span, nine roles are entered and exited. The shaded bands corresponding to each role signify the salience of that role to an individual at a particular time of life. Participation is displayed in terms of the width of the band. Commitment is displayed by the depth of the shading of the band. The combination of roles consume the life space of the individual. Each role will fluctuate in salience as other roles correspondingly increase or decrease.

Super (1980a) hypothesized that the more a person's abilities, interests, and values find ready outlets in the full range of his or her activities, the more successful and satisfied that person will be. Vocational adjustment would be measured by value satisfaction derived from all salient roles, rather than the role of work alone.

Adult students represent a unique population with unique needs. Since career counseling is of concern for adult learners, and theories support the significance of value satisfaction as a basis of vocational adjustment, it is important to know if adults differ in work value choice



Source: Super, D.E., 1980, p. 289
 THE LIFE-CAREER RAINBOW: NINE LIFE ROLES IN SCHEMATIC LIFE SPACE
 Figure 1-1

and value satisfaction. Since measures of career salience have been positively related to vocational satisfaction (Greenhaus 1971, 1973; Greenhaus and Simon 1977; Super 1980) it is important to know what affect, if any, measures of salience have on value choice. It is also important to know if measures of salience are different as a function of age. This study has examined the contribution of role salience, age, and sex, to value choice in career decision making. Accordingly, the following research questions were addressed in this study:

1. To what extent does age contribute to value choice among community college students when controlling for sex and salience?
2. To what extent does sex contribute to value choice among community college students when controlling for sex and salience?
3. To what extent does an overall measure of role salience contribute to value choice among community college students when controlling for sex and salience?
4. To what extent does the interaction of salience and age contribute to value choice among community college students?
5. To what extent does the interaction of salience and sex contribute to value choice among community college students?
6. To what extent does the interaction of age and sex contribute to value choice among community college students?
7. To what extent does the interaction of age, sex, and role salience contribute to value choice among community college students?

In seeking to answer these questions, the researcher used the Value Scale (Super, 1980c) to measure the relative

importance of each value to each person. The "Role Values Grid" of the Saliency Inventory (Super, 1980c) was used to measure the degree to which each value is sought within the roles of student, worker, homemaker, community member, and leisurite.

Purpose of the Study

The purpose of this study was to examine the contribution of age, sex, and role salience to value choice in career decision making among community college students of all ages. First, a correlation matrix was estimated to assess the relationship of scores on the Values Scale to scores on the "Role Values Grid" for each of the twenty-one values represented in both scales (See Table 4-1). Then a correlation matrix was estimated to assess the relationship of age to values (See Table 4-2). Next, regression analysis was used to determine the extent to which the controlling variables of age, sex, and role salience modify value choice. Analysis focused on the effects that the interactions of these variables have on value choice. Students of all ages were included so that those relationships could be examined across a wide age range, rather than for adult learners only. Data pertaining to marital status, student status, employment status, homemaking roles, and educational level were included as well.

Definition of Terms

Values--characteristic outer expressions and culturally influenced manifestations of needs (Katz, 1963). Work Values--those satisfactions of needs which are intrinsic in work (satisfaction sought from the work itself); as well as those satisfactions of needs which are extrinsic to work (satisfactions which may be the outcomes of work) (Super, 1970).

NOTE: the use of the term values in this study is used as a broader version of the term work values as the Values Scale and Salience Inventory ignore the difference between "life values" and "work values" suggesting that "work values" may be satisfied by roles other than work.

Work Value Orientation--the relative emphasis an individual places upon the intrinsic or extrinsic satisfactions which he or she seeks in work (Super, 1970).

Adult Learner--for the purposes of this study, adult learners are those full time and part time students who are older than the traditional college age of 18-22.

Role Salience--measure of the relative importance of each role (student, homemaker, leisurite, community member, worker) in satisfying one's values. Salience is broken down into measurements of commitment (one's emotional attachment to a role), participation (one's involvement in a role), and value realization within each role.

Career Salience--measure of the relative importance of the role of work to the other roles in one's life in terms of the ability to satisfy the values sought within each role.

Organization of the Study

The remainder of this study was organized in the following manner. The related literature is reviewed in Chapter II in terms of adult learners in today's higher education, work values, and career salience. In Chapter III, details of the methodology of this investigation are given. The findings, evaluation of the study, and analysis of data and responses to research questions are found in Chapter IV. The summary of the study, the conclusions, and recommendations for future research needs are given in Chapter V.

CHAPTER II

REVIEW OF RELATED LITERATURE

The review of literature related to the role of work values in adult career development is divided into three main sections as follows: (1) adult learners in today's higher education, (2) work values in career development, and (3) career salience.

Adult Learners in Today's Higher Education

Colleges and universities today are experiencing a dramatic rise in the enrollment of adults returning to college for a variety of reasons. Penn and Weaver (1979) listed the economic and social influence of the recession, the need for updated skills in today's labor market, the end of the Vietnam War, the women's movement, flexible admissions policies, and general work dissatisfaction as the most common reasons for the adult's return to college. McCrea (1979) found that adults returned to school mainly for economic reasons. Her research focused on the phenomena of women returning, which she saw as "part of the larger social revolution in the status of women" (p 15). The women she studied were conscious of the likelihood of working throughout their lives, and their choices of academic majors reflected the needs and demands of the current labor market.

Penn and Weaver (1979) additionally noted that current educational theory, suggesting that formal education should be a continuous process, has influenced the increase of adult learners in higher education.

Economic conditions also have played a role in encouraging institutions of higher education to recruit adult learners. Kimmel (1976) summarized a 1975 Census Bureau estimate showing a great decline in the population of traditional college age youths. The 1975 Census Bureau stated that of 120-million Americans, about 56% are twenty-five or older, which is nine million more than in 1970. In contrast, those between the ages of fourteen and seventeen increased by only one million from 1970 to 1975. Moreover, the pool of elementary students in 1975 was 9% smaller than in 1970. Leckie (1978) states that by 1975, almost one-half of the student population (48% of ten million) was over the age of twenty-two. Therefore, if colleges and universities are to maintain stable enrollment, they must attract older students.

Needs of Adult Learners

It is no longer adequate to simply open college doors and hope that adults will adjust to a traditional college; the college must adjust to them. Perrone and others (1977) noted that although we encourage the enrollment of adults, we still know very little about their educational,

vocational, social, and personal needs. These adults are consumers, growing in importance in higher education, and will be looking more closely for institutions which are responsive to their needs.

Several assessments of the needs of the adult learner in higher education have been conducted. Geisler and Thrush (1975) presented a needs assessment instrument to a random sample of 336 women, aged 28 and over, at the University of Wisconsin. The group mean age was 36. Results indicated that educational, personal, and vocational counseling were of top priority in the services sought by these older students. The problems they most frequently expressed included experiencing a lack of role definition, lack of self confidence, lack of time, lack of child care facilities, and lack of a sense of direction.

Gallagher and Demos (1970) found that although adults bring maturity and experience to the learning situation, they have a greater need for counseling than their younger counterparts. Krings (1976), and Hoenninger and Skovohl (1973) reached similar conclusions in their descriptive studies of adults, agreeing that extreme importance is attached to decisions made by the mid-life person. They stressed the need for both community colleges and universities to be sensitive to the greater emotional burdens carried by the adult learner. Heddesheimer (1976) addressed the ambivalence that accompanies change in the

adult's life, which includes loss and relief as well as excitement and fear. The pressures and challenges of entering the foreign environment of higher education, therefore, result in a greater need for counseling and support services.

Project ASK (Assessment for Self Knowledge) by the Educational Testing Service conducted an extensive survey of adult assessment and guidance materials (Pears and Weber, 1980). They found that only 20% of those counselors and educators who worked with adults felt that the content and quality of existing materials were satisfactory. They found that the format and content were juvenile, norms were not applicable, and adult concerns and experiences were not addressed. Project ASK summarized that attention must be paid to the importance of the variety of experiential learning that adults, unlike traditional college age students, bring to the educational or career counseling situation.

Studies by Astin and Panos (1969), Borow (1964), Devine (1975), Gaymer (1972), and Myers (1972) established that theories about career development of non-traditional college age students are needed. Seltz and Collier (1977) explained that adults make decisions in the context of multiple role responsibilities and emotional demands on their time and energy. Adults' self concepts are based on experiences in their lives and so their career decisions are more

pragmatic. They experience a different set of motivations than do adolescents.

Muskat (1978) addressed the need for curriculum changes to assist adults re-entering college. She suggested that a career counseling curricula be theoretically drawn from research literature on the psychological and psychosocial needs of adults as well as theories of vocational development and choice. The opportunity for professionals to work in student development and counseling with adult learners is increasing rapidly. The needs of this non-traditional student group are many. The development of a career counseling curriculum as suggested by Muskat seems to be a comprehensive and feasible way to facilitate work with adult learners. The internal conflicts which arise from the decision to return to school may be compared to the conflicts which are present with transitions from one developmental stage to another. Curricula which are sensitive to the additional psychological pressures on adult learners, as well as being sensitive to the vocational tasks of adults, may promote the emotional, academic, and vocational awareness needed for adults to successfully meet the challenges of higher education.

Characteristics of Adult Learners

Many distinctions exist between the guidance problems of youths and adults. Subgroups within the adult population

manifest some unique needs respective to their social and developmental history. Based on a one-year sample of 200 adults who sought counseling help from the Regional Learning Service in New York, Fredrickson, Macy, and Vickers (1978, p. 167) listed several barriers which adult students face. Age ranges in this sample were from 16 to 65, but only 8% were under 22. Sixty percent were between 26 and 45.

- Barriers to change -

- lack self confidence
- more aware of weaknesses than strengths
- reluctant to take risks
- fear discrimination
- awareness of occupational failures
- lack role models
- limited flexibility in seeing themselves in different role (especially men)
- males don't want to seem "unstable"
- females lack family support
- difficulty compromising their aspirations, interests, abilities, and opportunities

- Barriers to education -

- cost
- discomfort of sharing class with youth
- unaware of credit system for work
- inhibited by entrance requirements
- already feel skilled - hard to go back

- Other barriers -

- broad social conditions
- counselors lack of information for dealing with adults.

Career counseling is an avenue by which adult needs and concerns may be clarified, and barriers may be overcome. The role of values in career counseling, examined further in the following section, has proved to be an essential

component of career exploration, especially for adults.

Thoroman (1968) offered an explanation of the internalization of values in the career counseling process.

The dynamic nature of personality is dependent upon change, and change is often dependent upon a shift in in developing a cognitive re-experiencing of his situation. This enables him to utilize new values and determine his goals and actions in light of his new understanding of the environment. This is the entire process of vocational counseling. (p. 10)

The mid-life years are a time when stock is taken of where one is as compared to where one has been or might go. As Herr and Whitson (1979) reflected, this is painful, even when one has done well. The goals sought and achieved may be found hollow and bittersweet. Tyler (1962) in a similar vein reflected that potentialities will often far exceed opportunities and a striving toward self actualization will often include a renouncing of certain aspects of the self.

Adults, like traditional-age college students, may be overwhelmed by the process of career decision making. Values of particular interest to adults such as family considerations, implications of dual-career situations, the importance of support from friends and relatives during life transitions, geographic restrictions, and economic limitations, (all of which may have some bearing on career choices) should be addressed by counselors who now work with adult students. Attention to the value complications of adults will help ease their career exploration process.

Work Values in Career Development

The importance of one's value system as the basis of career decision making has been stressed by several theorists. Values may be used as the comprehensive term which describes an individual's needs, reflecting social and cultural forces, and balancing interests and aptitudes. Katz (1963) thus defines values as a "mediating force" binding these various attributes together. According to Super's (1953) career development theory, work values are crucial to career decision making, as they are at the heart of the self concept. Super stated:

work satisfaction and life satisfaction depend upon the extent to which the individual finds adequate outlets for his abilities, interests, personality traits, and values; they depend upon his establishment in a type of work, a work situation, and a way of life in which he can play the kind of role which his growth and exploratory experiences have led him to consider congenial and appropriate (pp. 189-190).

Super's (1953) developmental theory describes career development as a process integrating a self concept with a career self concept. One's career satisfaction is inseparable from one's life satisfaction. Gribbons and Lohnes (1968) stated that

taking the system of self concept as the immediate control over occupational preferences, then it seems likely that some hierarchy of values embedded in the system dominates the preference building process. (p.81)

Kuehn (1974) concurred stating

If choice of occupation is an expression . . . of basic personality rooted in the individual's value system, students must be encouraged to examine their values as

part of the process of making a career decision. (p. 232)

Herr and Witson (1979) also indicated that values play a significant role in the career decision making process.

Ginzberg and others (1951), McSweeney (1973), and Super (1957), agreed that vocational decision making is strongly affected by values attached to work and its rewards.

Tiedeman and O'Hara (1963) considered work values to be a vital factor in forming the ego identity and work identity. Ginzberg saw the role of one's values in the compromise process of choice as being vital as well. It is the individual's value scheme which enables him or her to consider past and present experiences when exploring future objectives. This is not to say that an individual's values do not change in time. As needs, interests, and experiences influence the development of an individual, the value scheme may be influenced as well. This may help to explain why career development is a continuous process rather than a single point of career decision making.

In defining work values as the major synthesizing force in career decision making, Katz (1963) stated:

If there is a single synthesizing element that orders, arranges, and unifies . . . that ties together an individual's perceptions of cultural promptings, motivating needs, mediating symbols, differentiating characteristics, and sense of resolution, that relates perception to self concept, and that accounts more directly for a particular decision or for a mode of choosing, it . . . is the individual's value system.(p.16)

Values have been defined as the trait most directly related to needs, or the motivation forces, unconscious or

conscious, by which satisfaction is sought. Maslow (1954) and Roe (1956) were instrumental in directing attention to the importance of needs in a theory of occupational choice "with emphasis on the hierarchy of needs which determine the order and nature of attempted gratification" (Katz, 1963 p. 16). Researchers such as Kline and Schneck (1950), Schaffer (1953) and Small (1953), have contributed to the understanding of the role of needs in occupational choice.

Values, however, may be distinct from needs as they are described teleologically in terms of goal satisfaction rather than as the motivating drive. Lofquist and Dawis (1978) described values as reference dimensions for describing needs. They said that values may be seen as second-order needs, conceptualized in the context of the theory of work adjustment. Katzell (1964) noted that incumbents possess values or needs, and jobs are instrumental in providing the fulfillments of those needs. Herr (1974) offered a need-and-value theory in which he acknowledged that there are

semantic difficulties in the two constructs. Need is a deficit, something one does not have. It is related to values to the extent one places high value on what one does not have. (p 240)

Much research has been conducted on the relationship of work values and interests. Some see work values as a set, where interests are a subset. Zytowski (1970b) stated

the spectrum of valuing is probably congruent with the spectrum of interests, but the units into which the spectrum is divided are considerably fewer than the number of distinct interests (p 70)

Super (1970) stated that

values are related to interests, but differ in that they are the qualities sought, rather than the activities or objects which embody them: they are thus more fundamental (p.4).

Values are the goals which motivate people to work. So values refer to the worth of outcomes and results of an activity rather than the "function pleasure" derived from performing the activity. A value might be "high income". How one likes to make money is the expressed interest.

Exact distinctions between the constructs of work values from life values, needs, and interests, are difficult to delineate. Perhaps this is because each of these constructs contribute to the frame of reference for the career decision making process. Each is influenced by the other. One may choose to be a doctor because he or she has an interest in science, has a need for a high standard of living, and values the opportunity to help people.

Typology of Work Values

Central to vocational adjustment is how well an occupation satisfies an individual's values. Ginzberg and others (1951) broke these satisfiers into three categories: (1) satisfaction from the work itself, (2) satisfaction from the concomitants of work, and (3) satisfaction from the outcomes of work. Work itself consists of the activities involved in getting a job accomplished. Concomitants refer to managerial policies,

supervision, associates, and other general characteristics of the occupation. Outcomes are the rewards, pay, prestige, service, products, or beauty created as a result of the work. Several work values inventories classify their value components under these three categories.

Super (1970) categorized work values as (1) intrinsic and (2) extrinsic. Intrinsic work values are those satisfactions which individuals seek in their work. Extrinsic values are those satisfactions which may be the outcomes of that work. Rosenberg (1957) identified three categories as well. These are labeled (1) people, (2) extrinsic rewards, and (3) self expression. Vocational adjustment is a function of the degree to which an individual is able to satisfy his or her values or needs in these three components of work. The relationship of variables to one's work value orientation is an area in need of further investigation.

Work Values and Age

The relationship of work value orientation and age has been examined by several researchers. The majority of these studies focused on a change in work value orientation over the adolescent years. More recently, there have been studies involving the work values of college students.

Morse (1978) studied the work values of mid-life adults attending a community college in Virginia which served urban, suburban, and rural clientele. Two random samples

were drawn from the total student population which had an age range of 17 to 55. Students were divided into young adults, ages 17 to 34, and mid-life adults, ages 35 to 55. The work values of these groups were compared for age, sex, and race. He found that intrinsic work values such as achievement, creativity, and intellectual stimulation were of primary importance to all groups except non-whites. This group ranked the extrinsic values such as economic returns and job security as being as important as the intrinsic values. Morse cited the importance of external and internal forces that act upon an individual influencing work value choice. He recommended further research on work value choice and its complications for career decision making.

An extensive literature review by Alvi (1981) on work values and attitudes of adults showed that work values tend to develop and evolve in later years. The opportunity for further education and occupational experience may result in a deeper understanding of oneself and in clarifying one's life goals. A study by Dietrich (1977) confirmed this point. Using four classes of a sample of 408 female full-time nursing students, Dietrich found that freshmen were characterized by extrinsic work values, whereas seniors were characterized by an intrinsic work value orientation.

A study using university students was conducted by Wagman (1965), using Centers' Job Values and Desires Questionnaire, originally used with a sample of adult men. Wagman used 122 sophomore men and 137 sophomore women, and

then compared his findings with those of Singer and Stefflre (1954a, 1945b) who had used the same instrument to study the work values of high school senior boys and girls. Wagman concluded:

1. High school males prefer job security and independence; university males prefer interesting experiences, leadership, and esteem.
2. High school females prefer security and independence while university females prefer interesting experience.
3. University men prefer esteem, while university women prefer social service.

Glogowski and Lanning (1976) used the Work Value Scale (WVS) developed by Eyde (1962) to study the relationship among work values and two age categories of women and their curriculum choices. Young women were defined as those twenty-one years of age and younger. Older women were those twenty-seven years of age and older. The WVS measured six work value factors: (1) dominance and recognition, (2) economic returns, (3) independence, (4) interesting activity and variety, (5) mastery and achievement, and (6) social environment. An analysis of variance showed a significant relationship between the age categories and each value with the exception of dominance and recognition. A summary of the difference in work values by age category follows:

- 1) Older women ranked higher in economic returns. This was viewed as a reflection of an experienced person's awareness of financial realities.
- 2) Younger women rated independence higher. Developmental theory defining this age category's struggle for independence was used to explain this result.
- 3) Older women ranked interesting activity higher. Respondents listed the desire to leave the monotony of the home as being responsible for this choice.

- 4) Older women ranked achievement mastery higher. This is consistent with Eydes' (1962) finding that older students are more purposeful and desire skill development, advancement, and self improvement.
- 5) Younger women ranked social environment higher. This is explained in terms of Erikson's definition of the stage of intimacy versus isolation when there is transition from high school norms valuing social interaction to a more independent lifestyle in the college years. (p 122)

Each of the studies listed determined that a relationship between age and work value choice does exist. Many suggested that an intrinsic value orientation was related to a deeper self understanding that accompanies growth and maturity. There are, however, contradictions in the value rankings of similar age groups between the studies. This is perhaps a reflection of the dates on which the studies were conducted. Social attitudes about the age of workers, women in the workforce, and work itself may have influenced work value choice as much as the age variable did.

Work Values and Sex

Blai (1964) supported the traditional assumption that women have different values orientations from men. The most common choices for men are economic rewards, management of others, recognition, security, and independence. The most common choices for women are personal contact and social service. This concurred with Wagman's (1965) study, listed earlier. A study by Gilbert, Manning, and Ponder (1980) attributed this value orientation difference to the influence of traditional sex role socialization.

A study by Kaufman and Fetters (1980) offered new findings in the work value differences between the sexes. They measured the work values of 208 accountants from the "Big 8" accounting firms. They found that there was

no significant difference between males and females on any components of work motivation measured, in the rewards they valued on the job, or on job characteristics they valued. (p 251)

Literature is replete with studies of the differences in values between the sexes, but in this study where the occupational level was controlled, women did not show less intrinsic attachment to work than men.

Gribbons and Lohnes (1968) conducted a longitudinal study using adolescent boys and girls to measure work value change over time. They found more similarities than differences between the boys and girls. Thompson (1966) had similar findings. Hales and Hartman (1978) noted that differences in work values held by boys and girls have appeared as early as the first grade. Past studies have suggested that these sex differences increase with age throughout elementary and secondary school. In their study of juniors and seniors at Ohio University, work value orientations were different between sexes at an older age, but most were not significantly different. They concluded that similarities were greater than differences found.

As with the relationship of work values and age, the relationship of work value choice and sex is still ambiguous. Studies recognize that males and females have

different value orientations yet a causal relationship is not inferred. It is difficult to determine the relative contribution of sex to value choice when comparing studies across different social climates. That the statistical methodologies of these studies consisted of analyses of variance rather than regression analysis in examining the relationship of sex and work value choice promoted further weaknesses. This relationship demands further clarification.

The Measurement of Work Values

Numerous counseling tools are based on the measurement of work values. The System of Interactive Guidance and Information (SIGI) is a computer system designed to help students make informed, rational decisions about their career choices by examining their values, identifying occupational alternatives, gathering relevant information, and learning the strategies of decision making (Katz, 1980). SIGI is based on a theory of guidance which emphasizes individual values and their roles in decision making (Katz, 1963). The purpose of SIGI is (1) to ensure consideration of a broad range of values that influence career choice, (2) to clarify rewards and satisfactions desired, and, (3) to stimulate close scrutiny and examination of values.

A highly regarded and much used Work Values Inventory (WVI) was developed by Super (1953) as part of a twenty-year

longitudinal career pattern study designed to test the concept of career maturity. The WVI consisted of 210 paired-comparison items measuring fifteen values, categorized into intrinsic, extrinsic rewards, and extrinsic concomitants. The intrinsic value category measured altruism, creativity, independence, intellectual stimulation, esthetics, achievement, and management. Extrinsic values include way of life, security, prestige, and economic returns. The extrinsic concomitants include surroundings, associates, supervisory relations, and variety.

A study on the work values of community college students, using Super's WVI, was conducted by Grace (1974). She explored the work value difference between various college majors. She also examined whether grade point average could be predicted from knowing one's value orientation. Altruism was found to be a dominant value for female students in allied health professions. Economic returns were the dominant values for males in general B.A. programs. Work values, as measured by the WVI, were found to be better predictors of college grade point averages than of high school grade point averages since values are an important dimension of motivations.

A Survey of Work Values was developed by Wollack et al., (1971). This instrument consisted of a series of scales measuring attitudes toward work. These attitudes are based on the numerous dimensions of the Protestant Work Ethic, which deals with the meaning that an individual

attaches to his or her role at work. The principal aspects of the Protestant Ethic as described by Max Weber (Means, 1965) and measured by the Survey of Work Values are individualism, asceticism, and industriousness.

Gordon (1960) prepared a Manual for Survey of Interpersonal Values. It consisted of 210 items which measured 10 hypothesized values. Through factor analysis the following 6 values were defined: support, conformity, recognition, independence, benevolence, and leadership.

Hammond (1954, 1956) asked college students what they hoped to gain from their occupations and, from their responses, developed the Occupational Attitudes Rating Scales. The four factors created were (1) Materialistic-economic status need, (2) Competitive personal status need, (3) Technical-structure need, and (4) Humanitarian-acceptance need. Factor 1 was related to career goals in business, law, and pharmacy. Factor 2 was related to journalism, dramatics, and advertising. Factor 3 was related to science and engineering, and factor 4 was related to social science, medicine, and social work.

Weiss, Dawis, England, and Lofquist (1964) developed the Minnesota Importance Questionnaire (MIQ) which measures vocational needs as dimensions of job satisfaction. Two factors yielded were that (1) reinforcers are usually found in the work setting (intrinsic), and, (2) a status-need dimension with reinforcers usually accompanies a high position in society (extrinsic).

Singer and Stefflre (1954a) developed the Vocational Values Inventory (VVI) from a study of the responses of high school students who were asked to name the three most important factors in choosing a job. Factors yielded were (1) security, (2) prestige, (3) money, (4) control, (5) job freedom, (6) altruism, (7) self realization. They compared their study of adolescents' work values with a study by Centers (1948) of adult work values and found that the adolescents valued fame, money, and interesting experience, while adults valued independence most highly.

A new Value Scale, recently developed by Super (1980c), was created as part of an international study on the importance of the role of work. The Value Scale focuses on the values that people seek in order to realize the importance of the role of work in their lives. This enables a counselor and client to examine work values with respect to the multiple role responsibilities that especially characterize the adult learner.

Various authors have noted the importance of work values. Zytowski's Taxonomy of Work Values (1970c, p 182) lists the measured work values of various instruments (See Figure 2-1). Zytowski (1970c) summarizes this taxonomy:

All six authors include some variation of security, prestige, and economic return. These plus advancement and recognition might be called "extrinsic factors," representing the outcomes of work, as contrasted with the means. Starting with surroundings and ending at supervision might be the category of concomitants. . . . The values between associates and altruism tap the range of relationship with people on the job, but the

TABLE 2-1 TAXONOMY OF WORK VALUES

Super	Herzberg	Rosenberg	MTQ	Steffle	Schaffer
Security	Job security	Secure future	Security	Security	Socio-economic status
Prestige	Status	Status, prestige	Social status	Prestige	Economic security
Economic return	Salary	Good deal of money	Compensation	Money	
Achievement	Achievement		Achievement		Mastery and achievement
	Advancement		Advancement		
	Recognition		Recognition		Recognition-approbation
Surroundings	Working conditions		Working conditions		
	Company policy and administration		Company policy and administration		
Associates	Interpersonal relations-Peers	Work with people	Co-workers		Affection and interpersonal relationships
Management	Interpersonal relations-Peers	Leadership	Authority	Control	Dominance
Supervisory	Interpersonal relations-Superiors		Supervision-Human relations-Super-vision-technical		Dependence
Independence	Supervision-technical		Independence		
Altruism		Free of supervision	Social service	Job freedom	Independence
		Helpful to others		Altruism	Social welfare
Creativity	Work itself	Creative, original	Creativity	Self-realization	Self-expression
Way of life	Factors in personal life		Moral values		Creativity and talent
Intellectual stimulation	Possibility of growth	Use special abilities	Ability utilization		Moral values
Variety	Responsibility	Adventure	Variety		
			Responsibility		
			Activity		

Source: Zytowski, D.G., 1970b, p. 182

factors starting with independence through to the end of the list are likely all part of the job itself, or intrinsic factors, rather than extrinsic or outcomes or work. (p 183)

Although authors do vary in their basic value lists, there is agreement on 12 to 15 values or value categories, and these, Zytowski (1970b) states, "may be taken as fundamental"(p.183).

Career Salience

The role that work plays in the development of an individual's self concept has been explored by several researchers listed earlier. The motivation to work, described as a combination of needs and values, was also defined earlier in the exploration of the role of work values in career development. A third variable which contributes to one's career self concept and to the motivation to work is career salience, or the importance of work in one's life. It seems obvious that an individual's motivation to work would be greatly affected by the importance assigned to the role of work in meeting needs and values.

Career counseling is a process of helping clients to find work-related outlets for their values and abilities. There are, however, several avenues by which personal values may be realized. These avenues are the various roles we all play in our lifetimes such as leisurite, family member, community member, student, etc. Super (1980b) points out that to really understand the meaning of one's involvement

in the role of work, one must see it in relation to the meaning of one's involvement in these other roles.

Playing various roles affects attitudes toward work, which, in turn, affects the values to be met in the work role. Super (1980b) stated that:

differing people attach affectively, behaviorally, cognitively differing amounts of importance to work, so that its importance varies with the importance of other roles, and that it depends upon individual values and upon opportunities which the labour market and society at large offer for the attainment of those values. (p.9)

An international research program called the Work Importance Study (WIS) sought to conceptualize this multi-dimensional model of role salience, where work is seen as one role which must be seen in relation to other roles in order to assess its importance. For purposes of measurement and definition, Super (1980d), divided role importance into three basic components: commitment, participation, and knowledge. Commitment is the emotional and attitudinal attachment to a particular role. It measures one's personal identification with a role. Participation is the behavioral component which measures actions taken toward involvement in a role. It is quite possible to have participation in a role without a commitment to that role, and vice versa. Knowledge is the cognitive aspect which may or may not contribute to one's commitment to or participation in a particular role. These components give the construct of role salience a concrete definition which may be used to compare the relative

importance of one role, such as that of a worker, to other roles one may play in a life career.

Research studies on career salience

Greenhaus (1971, 1973) operationalized the construct of work salience by devising a measure of the relative importance of work to other life roles. In a factorial investigation he showed career salience to be composed of three main components: (1) the relative priority of a career; (2) general attitudes toward work; and (3) career advancement and planning. Greenhaus (1971) used this factorial structure of career salience to evaluate the hypotheses that career salience would relate to a measure of congruence of work concept and self concepts and that those persons with greater degrees of career salience would have a greater measure of occupational satisfaction. Subjects in this study consisted of 377 students, in a variety of major fields, at two colleges; 104 males, with an average age of 21, and 273 females, with an average age of 20. Factor (2), general attitudes toward work, was found to be significantly related to occupational congruence for males, but only related to an "ideal" occupational congruence for females. Work attitudes were shown to be highly related to self esteem for both males and females. This study does not infer causality. A positive work attitude may facilitate motivation and thereby raise self esteem, or high self esteem may promote an individual to be encouraged and

positive in outlook toward the role of work in his or her life. Either way, career salience as measured by Greenhaus (1973) does relate positively to measures of self esteem.

Other investigations into work importance are worth noting. Dubin (1956) studied industrial workers' "central life interests" and found that work was perceived more as a means to an end than as holding any great importance in and of itself. Masih (1967) examined the relationship between the two variables of desire for prestige and need for achievement, and the measure of work importance. Additional investigations have focused on work importance as measured by job involvement (Lawler and Hall, 1970; Weissenberg and Gruenfeld, 1968; and Lodahl and Kejner, 1965).

A more recent investigation by Greenhaus and Simon (1977) examined the relationship between career salience and work values of vocationally decided and undecided community college students. The study used 153 students recruited from a psychology course. This sample was 66% female. A wide range of career choices and educational goals was represented in the sample. Their findings were consistent with Brenton, McDonald, and Richer (1972) in that low salience was related to high vocational indecision. A second important finding in the study by Greenhaus and Simon (1977) was that students who were vocationally decided tended to favor intrinsic work values over extrinsic work values. They attributed this to the possibility that those

students with intrinsic work value orientations focus on the specific content and activities of career options and are therefore more likely to find a career which appeals to them (p 109) A very interesting third finding of this study however, was that those students with the highest level of career salience, along with intrinsic value choices, were vocationally undecided. They were found to be engaged in careful examinations of occupations and were unwilling to make hurried decisions. Their intrinsic value orientation reflected a keener awareness of the significance of work in their lives. Each of these studies furthers the hypothesis that career salience is an important factor in vocational satisfaction. More research on work attitudes and the importance of work on work satisfaction is needed.

The relative salience or importance of work to other life roles is an area of research requiring much more investigation. Super (1980b) speaks of four main theaters; home, community, school, and work, in which each of our roles are played. The non-occupational positions occupied previous to and concurrent with one's career, influence the way a worker approaches his or her work. Studies show that the more a person's abilities and interests find outlets in the various roles played within the main theatres, the more satisfied and successful that person will be. Super (1939) showed that job and life satisfactions were greatest in people whose leisure pursuits were extensions of occupational

pursuits, but with greater degrees of freedom. Role continuity is associated with general life satisfaction.

Counselors must aid clients in finding these outlets for their values and abilities through work, leisure, family, and community. At various stages of life and career development, different roles will be more salient in fulfilling these needs. Super (1980A) defined a successful and satisfying career as one where "a good balance is struck between roles, where some important values are realized in one role, other values in other roles" (p 10)

Salience Inventory of the Work Importance Study

The relative importance that each role plays in an individual's self realization (successful expression of values and abilities) may be assessed. Based on the international Work Importance Study (Super, 1980b) the Salience Inventory was developed to measure work importance, the combination of commitment, participation, and knowledge. The Salience Inventory is a three-part instrument. It includes an involvement grid which yields a score for participation (what one actually does) and a score for commitment (how one feels about what one does). It also includes a values grid which yields a score for the degree to which five major life roles (school, work, community, family, and leisure) are seen as a means of realizing life values as well as for the relative importance of each of the values in the life of the respondent (Super, 1980d, p.2).

The Values Scale, described earlier, is the first part of the two-part instrument developed by the WIS. The Values Scale is used to ascertain the relative importance of each value to each person. The "Role Values Grid" of the Salience Inventory may then be used to indicate the degree to which each individual seeks each value in each of their major roles. The values on the Role Value Grid can then be multiplied by the importance of each value to that person in order to see how important each role is to that person in self realization based on values.

Summary

Gable and Prozek (1971) state:

We believe that in the future one of the most fruitful approaches to vocational decisions lies in the area of measurement of values. To be able to give reliable and meaningful information to students, for example, regarding their own patterns of work values seems to us essential for enlightened vocational decisions. (p.41)

They conclude that the process of choosing an appropriate vocation may be regarded as one of the most serious and yet difficult problems which a person may continually face in his or her maturation process. Research studies examining adults in higher education listed in this literature review, show that many adults face the task of career decision making with as much or more trepidation as do traditional age students. Many of the barriers; socially, psychologically, educationally, and economically, which contribute to the difficulty of career exploration were

cited earlier. The exploration of the values of adult learners has increased some but more knowledge of how or why adult learners differ from traditional age students in value orientation is called for.

An important factor affecting the adult learner which may or may not contribute to value choice is career salience. Studies of career salience reviewed herein have addressed the significance of including a measure of role salience when counseling individuals in their career decisions. A more comprehensive approach to career counseling may be the combination of measuring one's role salience and value orientation. This study will look at the contribution of role salience to value choice. The contribution of age and sex to value choice will also be examined. The knowledge gained concerning value choice, particularly of adult learners, will contribute to the improved career counseling services offered to this very important consumer in today's higher education.

CHAPTER III

RESEARCH METHODOLOGY

The significance of the construct of work values in career decision making has been established by previous research. The benefits of examining values within the context of role salience has been suggested as well. This researcher proposed that examining value choice in light of role salience was especially crucial for career counseling with adult learners whose lifestyle is characterized by multiple role responsibilities.

The purpose of the current study was to examine value choice in career decision making as a function of age, sex, and measure of role salience. The Values Scale (Super, 1980c) and the "Role Values Grid" of the Salience Inventory (Super, 1980c) were administered to a random sample of 330 Santa Fe Community College students who were registered for a variety of liberal arts courses, leading to a general Associate of Arts degree. Students of all ages were included in the study. The contributions of age, sex, and measure of role salience to value choice were examined by regression analysis. Information as to age, sex, past and present work experience, homemaking experience, marital status, and education was obtained.

The remainder of this chapter describes the research procedures, including: (1) the population and sample, (2) the research hypotheses, (3) the instruments, (4) the collection of data, (5) the statistical design, and (6) the limitations.

The Population and the Sample

The sample for this study was drawn from a population of community college students at Santa Fe Community College in Gainesville, Florida, enrolled in several liberal arts courses during the Summer, 1982, semester. The community college setting was chosen as the target population since it best represents the influx of adult learners in post-secondary education today. The age range at Santa Fe Community College spans from fifteen years to over sixty-five years of age. Table 3-1 shows enrollment data for Summer, 1982 semester. Table 3-2 shows the sample data in terms of age and sex. The proposed sample was to consist of a minimum of 300 students, and a maximum of 350 students. Meetings were arranged between this researcher and the instructors who agreed to allow their classes to be included in this study. Thirteen instructors were contacted and nine instructors agreed to allow their classes to participate in this study. It was explained that the total testing time would be about thirty minutes for both instruments. Classes contacted were randomly chosen from a computer printout of

TABLE 3-1 POPULATION OF SANTA FE COMMUNITY COLLEGE
SPRING A 1982

<u>Age</u>		<u>Sex</u>	
15-19	1317	Male	2420
20-24	2003	<u>Female</u>	<u>2788</u>
25-29	815	TOTAL	5208
30-34	419		
35-39	240	<u>RACE</u>	
40-44	131		
45-49	97	White	3960
50-59	40	Black	691
60-64	25	Am. Indian	11
65-over	50	Oriental Am.	56
<u>Unknown</u>	<u>8</u>	Hispanic	189
TOTAL	5208	Non Resident Alien	281
		<u>Other</u>	<u>20</u>
		TOTAL	5208

TABLE 3-2 DEMOGRAPHIC DATA OF SAMPLE BY AGE AND SEX

AGE	FREQUENCY	CUM. FREQ.	PERCENT	CUM. PERCENT
16	1	1	0.303	0.303
17	9	10	2.727	3.030
18	39	49	11.818	14.848
19	71	120	21.515	36.364
20	42	162	12.727	49.091
21	32	194	9.697	58.788
22	23	217	6.970	65.758
23	17	234	5.152	70.909
24	17	251	5.152	76.061
25	7	258	2.121	78.182
26	13	271	3.939	82.121
27	11	282	3.333	85.455
28	7	289	2.121	87.576
29	8	297	2.424	90.000
30	2	299	0.606	90.606
31	1	300	0.303	90.909
32	4	304	1.212	92.121
33	3	307	0.909	93.030
34	3	310	0.909	93.939
35	3	313	0.909	94.848
37	1	314	0.303	95.152
38	1	315	0.303	95.455
40	2	317	0.606	96.061
42	1	318	0.303	96.364
43	1	319	0.303	96.667
44	2	321	0.606	97.273
46	1	322	0.303	97.576
48	1	323	0.303	97.879
51	1	324	0.303	98.182
53	1	325	0.303	98.485
56	1	326	0.303	98.788
72	1	327	0.303	99.091
75	1	328	0.303	99.394
78	1	329	0.303	99.697
81	1	330	0.303	100.000

SEX				
F	202	202	62.733	62.733
M	120	322	37.267	100.000

liberal arts and sciences classes, including the areas of English, behavioral sciences, physical science, sociology, and psychology.

The Research Hypotheses

Value choice as a function of age, sex, and role salience was examined. The following null hypotheses were tested:

- H01 - No relationship will exist between age and the 21 value choices of community college students when controlling for sex and salience.
- H02 - No relationship will exist between sex and the 21 value choices of community college students when controlling for age and salience.
- H03 - No relationship will exist between overall measures of role salience and the 21 value choices of community college students when controlling for age and sex.
- H04 - No relationship will exist between the interaction of role salience and age and the 21 value choices of community college students.
- H05 - No relationship will exist between the interaction of salience and sex and the 21 value choices of community college students.
- H06 - No relationship will exist between the interaction of age and sex and the 21 value choices of community college students.
- H07 - No relationship will exist between the interaction of the age, sex, and the role salience and 21 value choices of community college students.

Instruments

The Value Scale and the Salience Inventory were developed as a product of the Work Importance study, an

international project aimed at developing a model for understanding the important role of work in satisfying an individual's values (Super, 1980d).

The Salience Inventory

The Salience Inventory is a three part instrument consisting of 1) a measure of participation in various roles, 2) a measure of commitment to various roles, and 3) a role values grid which measures the degree to which values are sought within various roles. Super (1980b) categorizes the major life roles into five basic groups: student, homemaker, worker, leisurite, and community member. The Salience Inventory measures the relative importance of each of these roles within an individual's life by determining the commitment, participation, and value realization sought in each of these roles. The Salience Inventory defines the roles as follows:

Studying - taking courses, going to school, preparing for class, studying in library, independent studying

Working - for pay or profit at job

Community Service - activities in community organization

Homemaking and family - taking care of home, fixing meals, cleaning, caring for dependents

Leisure - sports, television, hobbies, relaxing.

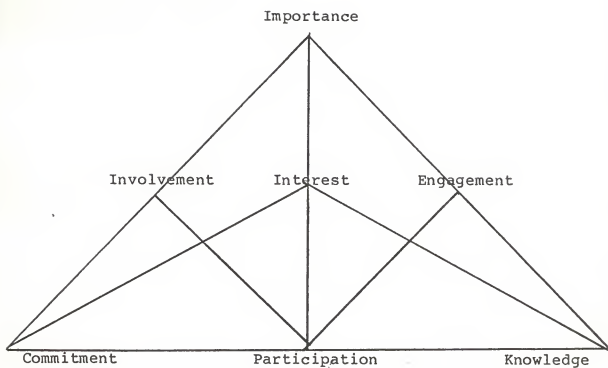
The "Role Values Grid" asks people what values they seek or find in each of the five types of activities: studying, working, community service, home and family, and

leisure or free time. The scale measures a four point range where (1) represents "little or none" and (4) represents "a great deal". A rating of (5) may be given for "does not apply" if value is not applicable to a role. This rating was counted as a missing variable in the data analysis.

The content validity of the Salience Inventory is displayed in the model of the Importance of Work (See Figure 3-1). This triangular figure shows the logic behind the theoretical foundation. At the baseline are the three basic components of role importance: commitment, participation, and knowledge. Half way up the sides are the higher level components. Involvement is shown as a combination of commitment and participation. Involvement therefore has behavioral and affective meanings. Engagement is shown to be a combination of participation and knowledge. Interest may then be seen as a combination of commitment and knowledge, excluding a behavioral component. Importance may then be seen as a combination of commitment and knowledge, excluding a behavioral component. Importance therefore, may logically be defined as comprising involvement, interest, engagement, commitment, participation, and knowledge. For the purposes of this study, measures of role salience were restricted to the results of the "Role Values Grid". Items for the "Role Values Grid" were chosen from the Value Scale.

The Value Scale

The Value Scale originally contained 230 value items. These were given to over 1000 college students and over 500



A MODEL OF THE IMPORTANCE OF WORK OR
OTHER LIFE-CAREER ROLES

Figure 3-1

Source: A Life-Span and Life Space Approach To and
Descriptive Framework of Career Development (Super, 1977).

high school students in three different states using five different schools within each state. Accepting only the best items on the basis of prior knowledge and expert judgment and item analysis (Super, 1980c, p.3) 21 values with five items per value were chosen for final item selection. From this pool of items, the single value stem with the greatest reliability was chosen for the "Role Values Grid". The Value Scale measures the relative importance of each of twenty-one values to an individual. This is an ideal listing of values as opposed to a list of values which find outlets in that individual's lifestyle.

The final five items for each value of the Value Scale were chosen by a cooperative effort. High content validity is a result of the work of expert representatives from thirteen countries who met five separate times presenting their statistical results from pilot studies. From the pooled information, three items were mutually agreed upon in an international consensus. The final two items were left for each individual country to decide which items were best suited for their culture's use. The instruments are now in their second published version. The alpha coefficient for each scale was greater than .60. The final list of values includes:

- ability utilization
- achievement
- advancement
- aesthetics
- altruism
- authority
- autonomy

creativity
economic reward
economic security
lifestyle
personal development
physical activity
prestige
risk
social interaction
social relations
variety
working conditions
cultural identity
physical prowess

The Values Scale uses a four-point measure where (1) rates "little or no importance", (2) "of some importance", (3) "important", and (4) "very important". The alpha coefficients of the Value Scale are listed in Table 3-3. Neither test has been published as of the date of this researcher's study. Therefore a paucity of validity measures is apparent. The standardization is expected to be completed by September, 1982. Publication is currently under contract negotiation.

These instruments were chosen for this study since together they provide a thorough examination of values alone as well as an investigation of values in terms of role salience. To this researcher's knowledge, no other measures of career salience are based on values as is the Salience Inventory. They were developed with the measure of the importance of work in mind which is central to this study.

Collection of Data

Arrangements for scheduling testing days were made by the researcher at the convenience of each individual

TABLE 3-3 INTERNAL CONSISTENCY
(ALPHA COEFFICIENTS) VALUE SCALES

Value High School 3rd Year N=686 University Years 1-3 N=1042

1. Ability Utilization	82	88
2. Achievement	83	87
3. Advancement	83	87
4. Aesthetics	90	91
5. Altruism	88	89
6. Associates	85	88
(Social Interaction)		
7. Authority	84	87
8. Autonomy	80	86
9. Creativity	87	88
10. Economic Rewards	80	83
11. Economic Security	88	91
12. Environment	76	78
13. Intellectual Stimulation	83	88
14. Lifestyle	79	82
15. Participation in	81	82
Decision Making		
16. Prestige	84	88
17. Responsibility	72	81
18. Risk Taking	87	89
19. Spirituality	82	83
20. Supervisory Relations	82	84
21. Variety	80	84
22. Cultural Identity	77	80
23. Physical Activity	80	79

Omitting any one item from the scale reduces the Alpha by about .01 to .03 points, depending upon the item.

Source: "Report of the Fourth Working Conference of the Work Importance Study", held at the Inter-University Center. Dubrovnik, Yugoslavia, October (Super, 1980c).

instructor. Nine instructors agreed to allow their classes to participate in this study. The instructors were asked to briefly introduce the researcher who then explained the purpose of the study to the subjects. The researcher then read the instructions for completing the Value Scale and the "Role Values Grid" of the Saliency Inventory.

The instruments were presented at the beginning of each meeting and collected by the researcher when all students had finished marking their answers. Subjects were asked to mark their sex and year of birth on the answer sheets. The entire procedure took about 30 minutes, including the brief introduction to the study, as well as time for collecting the tests and answer sheets.

The Statistical Design

The NCS Trans Optic Answer Sheet was used to record raw scores yielded by both the Value Scale and the "Role Values Grid". The data were recorded on magnetic tape and transferred, by way of programming, to a disk at the Northeast Regional Data Center (NERDC).

A correlation matrix was estimated to assess the relationship between scores on the Values Scale and scores on the "Role Values Grid" for each of twenty-one values measured by these scales. A second correlation matrix was estimated to assess the relationship between age and values. Regression analysis was used to determine the extent to

which age, sex, and role salience as independent variables related to value choice.

The exploratory data analysis consisted of a sequence of tests, the first being a test of significance made of all variables en masse. Essentially, this was a test of the hypotheses that role salience, age, and sex do not explain variation associated with value choice. Simplification of model statements continued until all non-significant variables were eliminated and only significant factors remained in the model statement. The main effects as well as interaction effects of these variables on value choice was the focus of analysis.

Limitations

Several limitations may have affected the findings of this study. Only one community college was used to select the sample. A self-selection process occurred since the individuals in this study chose to become students. The student of traditional and non-traditional age, therefore, may or may not reflect value choices of the population in general. Therefore, the relationship of age, sex, and salience to value choice is limited to the population of individuals in higher education.

A study of values is not without the external and internal forces which affect individuals' career decisions. A great variety of social, cultural, and economic factors may

greatly affect the findings of this study. Observations of values as opposed to specifically-defined "work" values may prove less valid in helping to understand career choice processes.

The greatest limitation may have been the use of an unpublished instrument, lacking in criteria related validity as well as predictive validity. The instruments have content validity and excellent reliability statistics, but their novelty may reduce the utilization of the results.

CHAPTER IV

RESULTS OF THE STUDY

The purpose of this study was to examine the relationship between value choices of community college students and age, sex, and measure of role salience, as well as the relationships of the interactions of these variables to value choice. Value choice was determined through the administration of the Value Scale (See Appendix A). A measure of role salience was derived from the scoring of the "Role Values Grid" of the Salience Inventory (See Appendix B). The sample of community college students (N=330) consisted of male and female students ranging in age from sixteen to eighty-one. Table 3-2 reveals the demographic data of the sample in terms of age and sex.

The general questions of the nature of the relationships between the dependent variable of value choice in career decision making of community college students and the independent variables of age, sex, and measures of role salience were studied. Correlation matrices of the relationship between values and salience as well as age and values were estimated (See Tables 4-1 and 4-2). Next, a series of regression analyses was conducted. A test of significance of the overall model of all variables en masse

TABLE 4-1 CORRELATION MATRIX OF THE NON-CONDITIONAL
RELATIONSHIP OF VALUES AND ROLE SALIENCE

	N	P	R	R ²
V1/RV1*	322	.0001	.379	.144
V2/RV2*	320	.0001	.409	.167
V3/RV3*	318	.0001	.441	.194
V4/RV4*	319	.0001	.445	.198
V5/RV5*	321	.0001	.352	.123
V6/RV6*	316	.0001	.410	.168
V7/RV7*	316	.0001	.309	.095
V8/RV8*	319	.0001	.394	.155
V9/RV9*	321	.0001	.365	.133
V10/RV10*	315	.0001	.435	.186
V11/RV11*	315	.0001	.419	.175
V12/RV12*	319	.0001	.484	.234
V13/RV13*	318	.0001	.440	.193
V14/RV14*	309	.0001	.420	.176
V15/RV15*	312	.0001	.444	.197
V16/RV16*	311	.0001	.402	.161
V17/RV17*	317	.0001	.382	.145
V18/RV18*	311	.0001	.429	.184
V19/RV19*	316	.0001	.437	.190
V20/RV20*	316	.0001	.361	.130
V21/RV21*	315	.0001	.442	.195

* RV stands for 'Role Value' which represents the salience measure for each value.

TABLE 4-2 CORRELATION MATRIX OF THE NON-CONDITIONAL
RELATIONSHIP BETWEEN AGE AND VALUES

Age/V1	N	P	R	R ²
V1	324	.01	.135	.018
V2	323	.78	.016	.0002
V3	323	.24	.065	.004
V4	323	.60	.029	.0008
V5	323	.04	.113	.013
V6	319	.41	.046	.002
V7	319	.13	.084	.007
V8	323	.03	.120	.014
V9	322	.01	.143	.020
V10	318	.56	.033	.001
V11	320	.15	.080	.006
V12	320	.76	-.017	.0003
V13	319	.61	-.028	.0007
V14	317	.77	.016	.0002
V15	320	.72	.02	.0004
V16	318	.04	.114	.013
V17	320	.69	.022	.0004
V18	317	.76	.017	.0003
V19	318	.27	.062	.004
V20	321	.67	.024	.0005
V21	320	.03	-.121	.014

for each of the twenty-one values was conducted initially. Where interactive effects and main effects were non-significant, a simplified model statement was developed. This process continued until all non-significant variables were eliminated from the model statement.

General hypotheses stated that no linear or interactive relationships would exist between the dependent and independent variables. The relationship between the dependent and independent variables for each value was tested for significance at a $P < .05$ level. Analysis for each value follows:

TABLE 4-3 ABILITY UTILIZATION (V1)
MODEL SIMPLIFICATION P VALUES

V1 P Values	Overall	1st	2nd
Age	.0057	.0051	.0094
Sex	.285		
RV ₁	.0001	.0001	.0001
Age*RV ₁ ^o	.0319 ^o	.0697	
RV ₁ *Sex	.3177		
Age*Sex	.6333		
Age*Sex*RV ₁ ^o	.7344		
F/R ²	9.28/.174	21.82/.17	30.85/.16

^o RV represents role value which is a measure of salience

The relationship between the dependent variable, ability utilization (V1), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic = .174 which implies that 17% of the variance in ability utilization was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 9.28, significant at the $P = .0001$ level. Thus, the relationship

between ability utilization and age, sex, salience, and their interactions was statistically significant.

Examination of the partial F statistic revealed that the three-way interaction (age*sex*RV), the two-way interactions (age*sex, RV*sex) and the main effects for sex were all non-significant at a $P < .05$ level.

A three-factor model including age, salience, and the interaction of age*salience was then tested. This simplified model revealed an F statistic of 21.82 at a $P = .0001$ level and $R^2 = .17$. The partial F statistic revealed that the interaction of age*salience was no longer significant.

A two-factor model including the age and salience main effects was then tested. This resulted in an F statistic of 30.85, $R^2 = .162$, significant at a $P = .0001$ level. The partial F statistics for age and salience remained significant. Examination of the correlation matrices determining the contributions of age and salience to values (See Tables 4-1 and 4-2) revealed that for V1, age shared 1.8% and salience shared 14.4% of the variation in ability utilization.

Older individuals scored higher than did younger individuals. Based on the above analysis it can be concluded that ability utilization was a function of age and salience for the subjects in this study.

TABLE 4-4 ACHIEVEMENT (V2)
MODEL SIMPLIFICATION P VALUES

V2	Overall	1st
Age	.8686	.4974
Sex	.0604	
RV ₂	.0001	.0001
Age*RV ₂	.0219	.0354
RV ₂ *Sex	.3436	
Age*Sex	.7654	
Age*Sex*RV ₂	.1216	
F/R ²	11.60/.21	23.16/.18

The relationship between the dependent variable, achievement (V2), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic = .210 which implies that 21% of the variance in achievement was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 11.60, which was significant at the $P = .0001$ level. Thus, the relationship between achievement and age, sex, salience, and their interactions was statistically significant.

Examination of the partial F statistic revealed that the three-way interaction (age*sex*salience), the two-way interactions (age*sex and salience*sex), and the main effects for age and sex were all non-significant at a $P < .05$ level.

A three-factor model including age, salience, and the interaction of age*salience was then tested. This simplified model revealed an $R^2 = .18$ and an F statistic of 23.16 at a $P = .0001$ level. The partial F statistics for the main effects of salience and the interaction of age*salience

remained significant. Interpretation was then restricted to the plotting of the regression equation in order to understand the nature of the interaction effect.

Four points were arbitrarily chosen, two levels of age (age 20 and age 50) and two levels of salience scores (level 1 and level 4) to be substituted into the regression equation so that the interaction effect could be plotted.

$$V2 = 16.17 + .08X_{RV2} - .18X_{age} + .01X_{RV2} * X_{age}$$

$$\begin{aligned} V2 &= 16.17 + .08(1) - .18(20) + .01(1)X20 = 12.85 \\ &= 16.17 + .08(4) - .18(20) + .01(4)X20 = 13.69 \\ &= 16.17 + .08(4) - .18(50) + .01(4)X50 = 9.49 \\ &= 16.17 + .08(1) - .18(50) + .01(1)X50 = 7.75 \end{aligned}$$

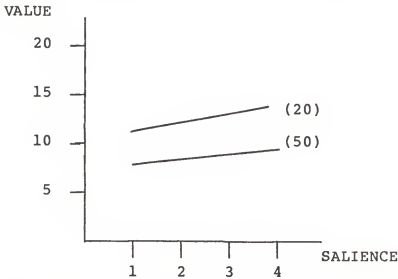


Figure 4-1 PLOT OF REGRESSION LINES RELATING SALIENCE TO VALUE CHOICE FOR 20 AND 50 YEAR OLD STUDENTS

Based on the above analyses it was concluded that achievement was a function of the interaction of age*salience in this study. Younger individuals in this study were consistently higher in rating this value than were older individuals regardless of the level of salience. The difference between these groups is greater at a high level of salience.

TABLE 4-5 ADVANCEMENT (V3)
MODEL SIMPLIFICATION P VALUES

V3	Overall	1st
Age	.1835	
Sex	.1485	
RV ₃	.0001	.0001
Age*RV ₃	.0709	
RV ₃ *Sex	.1001	
Age*Sex	.2744	
Age*Sex*RV ₃	.1949	
F/R ²	13.23/.23	76.68/.19

The relationship between the dependent variable, advancement (V3), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .23 which can be interpreted to mean that 23% of the variance in advancement was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 13.23, significant at the $P = .0001$ level, which was less than the criteria set for statistical significance. Thus the relationship between achievement and age, sex, salience, and their interactions was statistically significant.

Examination of the partial F statistic revealed that all interaction effects, as well as the main effects of age and sex were all non-significant at a $P < .05$ level. A single-factor model including only salience was then tested. This simplified model revealed an $R^2 = .19$ and an F statistic of 76.68, significant at a $P = .0001$ level. Based on the above analysis, it was concluded that advancement in this study was a function of salience, explaining 19% of the variance in this value.

TABLE 4-6 AESTHETICS (V4)
MODEL SIMPLIFICATION P VALUES

V4	Overall	1st
Age	.5392	.1418
Sex	.0041	.1373
RV ₄	.0001	.0001
Age*RV ₄	.5112	
RV ₄ *Sex	.1784	
Age*Sex	.0324	.0242
Age*Sex*RV ₄	.1060	
F/R ²	13.70/.24	22.79/.23

The relationship between the dependent variable, aesthetics (V4), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic = .24 implying that 24% of the variance in aesthetics was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 13.70, significant at the $P = .0001$ level. Thus, the relationship between aesthetics and age, sex, salience, and their interactions was statistically significant.

Examination of the partial F statistic revealed that the three-way interaction (age*sex*salience), the two-way interactions (age*salience and salience*sex), and the main effects for age and sex were all non-significant at a $P < .05$ level.

A four-factor model including the significant factors of age, sex, salience, and the interaction of age*sex was then tested. This simplified model revealed an $R^2 = .23$ and an F statistic of 22.79 at a $P = .0001$ level. The main effect of salience and the interaction effect of age*sex

remained significant. Interpretation was then restricted to the plotting of regression equations in order to understand the nature of the interaction effect. Two points were arbitrarily chosen for age (age 20 and age 50), males were equal to 0, and females were equal to 1:

$$10.33 - 1.95X_{\text{sex}} + .46X_{\text{RV}_4} - .11X_{\text{age}} + .13X_{\text{age}}*X_{\text{sex}}$$

M/20	$10.33 - 1.95(0) + .46(1) - .11(20) + .13(20)(0) = 8.59$
M/50	$10.33 - 1.95(0) + .46(1) - .11(50) + .13(50)(0) = 9.43$
F/20	$10.33 - 1.95(1) + .46(1) - .11(20) + .13(20)(1) = 9.24$
F/50	$10.33 - 1.95(1) + .46(1) - .11(50) + .13(50)(1) = 9.84$

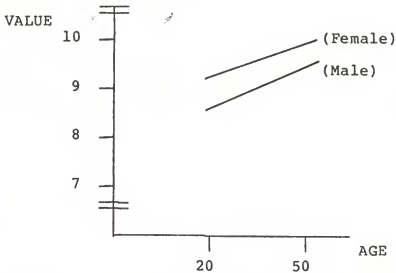


Figure 4-2 PLOT OF REGRESSION LINES RELATING AGE TO VALUE CHOICE FOR MALES AND FEMALES

Based on the above analysis it is concluded that aesthetics was a function of the interaction of age and sex in this study. The regression coefficient is negative indicating that females in this study consistently rated higher in this value when compared with males of the same age range. Older individuals rated this value higher regardless of sex.

TABLE 4-7 ALTRUISM (V5)
MODEL SIMPLIFICATION P VALUES

V5	Overall	1st
Age	.0405	.0181
Sex	.0011	.0009
RV5	.0001	.0001
Age*RV5	.7374	
RV5*Sex	.0755	
Age*Sex	.1241	
Age*Sex*RV5	.5724	
F/R ²	9.32/.176	19.62/.16

The relationship between the dependent variable, altruism (V5), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .18 which can be interpreted to mean that 18% of the variance in altruism is shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 9.32, significant at the $P = .0001$ level. Thus, the relationship between altruism and age, sex, salience and their interactions is statistically significant.

Examination of the partial F statistic revealed that all interaction effects were non-significant at a $P < .05$ level. A three-factor model including the main effects of age, sex, and salience was then tested. This simplified model revealed an $R^2 = .16$ and an F statistic of 19.62 significant at a $P = .0001$ level. Examination of the correlation matrices determining the contributions of age and salience (See Tables 4-1 and 4-2) revealed that for altruism, age shared 1.3%, and salience shared 12.3% of the variance in this value. Females scored higher than males and older

individuals scored higher than did younger individuals. Based on the above analysis, it was concluded that altruism is a function of age, sex and salience for subjects in this investigation.

TABLE 4-8 AUTHORITY (V6)
MODEL SIMPLIFICATION P VALUES

V6	Overall	1st	2nd
Age	.4703		
Sex	.0030	.1041	
RV ₆	.0001	.0001	.0001
Age*RV ₆	.7902		
RV ₆ *Sex	.3320		
Age*Sex	.7853		
Age*Sex*RV ₆	.0821		
F/R ²	10.02/.188	32.73/.176	63.69/.17

The relationship between the dependent variable, authority (V6), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .19 meaning that 19% of the variance in authority was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 10.02 significant at the $P = .0001$ level. Thus, the relationship between authority and age, sex, salience, and their interactions was found to be statistically significant.

Examination of the partial F statistic revealed that all interaction effects as well as the main effect for age were non-significant at a $P < .05$ level. A two-factor model including sex and salience was then tested. This simplified

model revealed an $R^2 = .176$ and an F statistic of 32.73 significant at a $P = .0001$ level. The main effect of sex became non-significant here so a single-factor simplified model was tested for salience alone. This revealed an $R^2 = .17$ and an F statistic of 63.69 significant at a $P = .0001$ level. This may be interpreted to mean that 17% of the variance in authority is due to salience. Based on the above analysis it was concluded that authority was a function of salience for subjects in this study.

TABLE 4-9 V7 AUTONOMY
MODEL SIMPLIFICATION P VALUES

V7	Overall	1st
Age	.0839	.0701
Sex	.0177	.0205
RV7	.0001	.0001
Age*RV7	.0073	.0076
RV7*Sex	.1237	
Age*Sex	.0734	
Age*Sex*RV7	.7727	
F/R ²	7.80/.15	12.13/.14

The relationship between the dependent variable, autonomy (V7), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .15, interpreted to mean that 15% of the variance in autonomy was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 7.80 significant at the $P = .0001$ level. Thus, the relationship between

autonomy and age, sex, salience, and their interactions was statistically significant.

Examination of the partial F statistic revealed that the three-way interaction (age*sex*salience) and the two-way interactions (age*sex and salience*sex) as well as the main effect of age were all non-significant at a $P < .05$ level. A four-factor model including age, sex, salience, and age*salience was then tested. This simplified model revealed an $R^2 = .14$ and an F statistic of 12.13 significant at a $P = .0001$ level.

Interpretation was then restricted to the plotting of the regression equation in order to understand the nature of the interaction effect. Again two levels of age and two levels of salience were arbitrarily chosen in order to produce these regression equations.

$$V7 = 17.93 - .29X_{age} - .18X_{RV7} + .02X_{age} * X_{RV7}$$

$$\begin{aligned} V7 &= 17.93 + .29(20) - .18(1) + .02(20)(1) = 12.35 \\ &= 17.93 + .29(20) - .18(4) + .02(20)(4) = 13.01 \\ &= 17.93 + .29(50) - .18(1) + .02(50)(1) = 4.25 \\ &= 17.93 + .29(50) - .18(4) + .02(50)(4) = 6.71 \end{aligned}$$

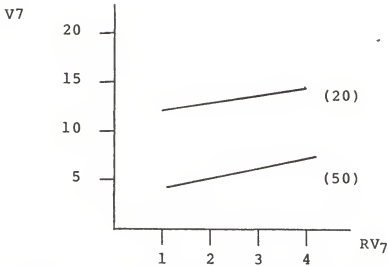


Figure 4-3 PLOT OF REGRESSION LINES RELATING SALIENCE TO VALUE CHOICE FOR 20 AND 50 YEAR OLD STUDENTS

Based on the above analyses it was concluded that autonomy in this study was a function of the interaction of age*salience. The difference between individuals with low levels of salience (8.1) is less than the difference between individuals with high levels of salience (6.3). Younger individuals in this study were consistently higher in rating this value than were older individuals.

TABLE 4-10 CREATIVITY (V8)
MODEL SIMPLIFICATION P VALUES

V8	Overall	1st
Age	.0277	.0254
Sex	.1734	
RV ₈	.0001	.0001
Age*RV ₈	.5184	
RV ₈ *Sex	.7479	
Age*Sex	.6376	
Age*Sex*RV ₈	.9431	
F/R ²	9.02/.172	32.11/.168

The relationship between the dependent variable, creativity (V8), and the independent variables of age, sex,

salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .17. The test of significance for the overall model resulted in a computed F statistic of 9.02. Thus, the relationship between creativity and age, sex, salience, and their interactions was statistically significant as $P = .0001$.

Examination of the partial F statistic revealed that all interaction effects as well as the main effect of sex were non-significant at a $P < .05$ level. A two-factor model including age and salience was then tested. This simplified model revealed an $R^2 = .168$ and an F statistic of 32.11 significant at a $P = .0001$ level.

Examination of the correlation matrices determining the contributions of age and salience to value choice (See Tables 4-1 and 4-2) revealed that for creativity, age shared 1.4% and salience shared 15.5% of the variance in this value. Older individuals rated this value higher than did younger individuals. Based on the above analyses, it was concluded that creativity in this study area was a function of age and salience.

TABLE 4-11 ECONOMIC REWARD (V9)
MODEL SIMPLIFICATION P VALUES

V9 P Values	Overall	1st
Age	.0022	.0053
Sex	.7776	
RV ₉	.0001	.0001
Age*RV ₉	.3544	
RV ₉ *Sex	.4220	
Age*Sex	.7584	
Age*Sex*RV ₉	.5845	
F/R ²	7.95/.15	29.10/.15

Tests were conducted on the relationship between the dependent variable (V9), economic reward, and the independent variables of age, sex, salience, and their interactions. The overall model resulted in an R^2 statistic of .15 which means that 15% of the variance in economic reward was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 7.95, significant at the $P = .0001$ level. Thus, the relationship between economic reward and age, sex, salience, and their interactions was statistically significant.

Examination of the partial F statistic revealed that all of the interaction effects as well as the main effect for sex were non-significant at a $P < .05$ level. A two-factor model including age and salience was then tested. This simplified model revealed an $R^2 = .15$ and an F statistic of 29.10, significant at a $P = .0001$ level.

Examination of the correlation matrices determining the contributions of age and salience to value choice revealed (See Tables 4-1 and 4-2) that for economic reward, age shared 2% while salience shared 13% of the variance in this value. Younger individuals rated this value higher than older individuals. Based on the above analyses, it was concluded that economic reward was a function of age, and salience in this study.

TABLE 4-12 LIFESTYLE (V10)
MODEL SIMPLIFICATION P VALUES

V10	Overall	1st
Age	.4530	.7846
Sex	.5230	
RV7	.0001	.0001
Age*RV7	.0206	.0214
RV7*Sex	.4491	
Age*Sex	.6907	
Age*Sex*RV7	.9587	
F/R ²	11.57/.21	26.47/.20

The relationship between the dependent variable, lifestyle (V10), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .21 implying that 21% of the variance in lifestyle was shared by the main and interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 11.57, significant at the $P = .0001$ level. Thus, the relationship between lifestyle and age, sex, salience, and their interactions was statistically significant.

Examination of the partial F statistic revealed that the three-way interaction (age*sex*salience), the two-way interactions (salience*sex and age*sex), as well as the main effect for sex were all non-significant at a $P < .05$ level.

A three-factor model including age, salience, and age*salience was then tested. This simplified model revealed an $R^2 = .20$ and an F statistic of 26.47, significant at a $P = .0001$ level.

Interpretation was then restricted to the plotting of the regression equations in order to understand the nature

of the interaction effect. Two levels of age were arbitrarily chosen (age 20 and age 50) as were two levels of salience (one and four) for the development of regression equations:

$$V_{10} = 15.6 + .046X_{RV_{10}} - .19X_{age} + .01X_{RV_{10}} * X_{age}$$

$$\begin{aligned} V_{10} &= 15.6 + .046(1) - .19(20) + .01(1)(20) = 12.046 \\ &= 15.6 + .046(1) - .19(50) + .01(1)(50) = 6.646 \\ &= 15.6 + .046(4) - .19(20) + .01(4)(20) = 12.784 \\ &= 15.6 + .046(4) - .19(50) + .01(4)(50) = 8.284 \end{aligned}$$

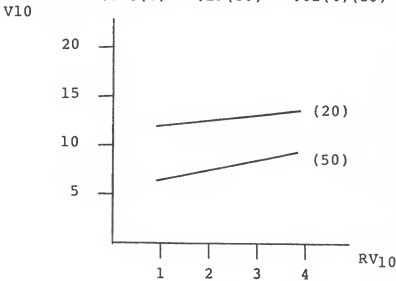


Figure 4-4 PLOT OF REGRESSION LINES RELATING SALIENCE TO VALUE CHOICE FOR 20 AND 50 YEAR OLD STUDENTS

Based on the above analyses, it was concluded that lifestyle was a function of the interaction of age and salience for the subjects in this study. The difference between individuals with high salience (4.5) was less than the difference between individuals with low salience (5.4) for this value. Younger individuals were consistently higher than older individuals in rating this value regardless of the level of salience.

TABLE 4-13 PERSONAL DEVELOPMENT (V11)
MODEL SIMPLIFICATION P VALUES

V11 P Values	Overall	1st
Age	.1396	
Sex	.2707	
RV11	.0001	.0001
Age*RV11	.0610	
RV11*Sex	.8206	
Age*Sex	.2602	
Age*Sex*RV11	.1264	
F/R ²	10.69/.199	66.71/.18

The relationship between the dependent variable, personal development (V11), and the independent variables of age, sex, salience, and their interactions was also tested. The overall model resulted in an R^2 statistic of .20. The test of significance for the overall model resulted in a computed F statistic of 10.69, significant at the $P = .0001$ level. Thus, the relationship between personal development and age, sex, salience and their interactions was statistically significant for this study.

Examination of the partial F statistic revealed that all interaction effects as well as the main effects for age and sex were non-significant at a $P < .05$ level. A single-factor model including only salience was then tested. This simplified model revealed an $R^2 = .18$ and an F statistic of 66.71, significant at a $P = .0001$ level.

Examination of the correlation matrix of salience and value choice (See Table 4-1) revealed that 17.5% of the variance in personal development can be explained by the salience of personal development. Based on the above analysis, it was concluded that personal development was a function of salience in this study.

TABLE 4-14 PHYSICAL ACTIVITY (V12)
MODEL SIMPLIFICATION P VALUES

V12	Overall	1st
Age	.1693	
Sex	.0003	.0016
RV12	.0001	.0001
Age*RV12	.8515	
RV12*Sex	.5315	
Age*Sex	.6857	
Age*Sex*RV12	.1229	
F/R ²	15.74/.27	53.42/.26

The relationship between the dependent variable, physical activity (V12), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .27 which can be interpreted to mean that 27% of the variance in physical activity was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 15.74, significant at the $P = .0001$ level. Therefore, the relationship between physical activity and age, sex, salience, and their interactions was statistically significant in this investigation.

Examination of the partial F statistic revealed that all interaction effects as well as the main effect of age were non-significant at a $P < .05$ level. A two-factor model including sex and salience was then tested. This simplified model revealed an $R^2 = .26$ and an F statistic of 53.42, significant at a $P = .0001$ level.

Examination of the correlation matrices of salience and values (See Table 4-1) revealed that salience shared 23% of the variance in this value. Males scored higher on this

value than did females. Based on the above analyses, it was concluded that physical activity was a function of sex and salience for subjects in this study.

TABLE 4-15 PRESTIGE (V13)
MODEL SIMPLIFICATION P VALUES

V13 P VALUES	Overall	1st
Age	.3510	
Sex	.5322	
RV ₁₃	.0001	.0001
Age*RV ₁₃	.9462	
RV ₁₃ *Sex	.0895	
Age*Sex	.6234	
Age*Sex*RV ₁₃	.8590	
F/R ²	11.04/.20	75.89/.19

The relationship between the dependent variable, prestige (V13), and the independent variables of age, sex, salience, and their interactions was examined next. The overall model resulted in an R^2 statistic of .20 which can be interpreted to mean that 20% of the variance in prestige was shared by the main and interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 11.04, significant at the $P = .0001$ level.

Examination of the partial F statistic revealed that all interaction effects as well as the main effects of age and sex were non-significant at a $P < .05$ level. A single-factor model including only salience was then tested. This simplified model revealed an $R^2 = .19$ and an F statistic of 75.89 significant at a $P = .0001$ level.

The correlation matrix of salience and values (See Table 4-1) showed that salience shared 19% of the variance in prestige. Based on the above analysis, it was concluded that prestige was a function of salience for subjects in this investigation.

TABLE 4-16 RISK (V14)
MODEL SIMPLIFICATION P VALUES

V14 P Value	Overall	1st
Age	.8135	
Sex	.0038	.0103
RV ₁₄	.0001	.0001
Age*RV ₁₄	.5839	
RV ₁₄ *Sex	.9768	
Age*Sex	.0735	
Age*Sex*RV ₁₄	.2810	
F/R ²	10.98/.21	36.05/.19

The relationship between the dependent variable, risk (V14), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .21 which can be interpreted to mean that 21% of the variance in risk was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 10.98, significant at the $P = .0001$ level. Thus, the relationship between risk and age, sex, salience and their interactions is statistically significant.

Examination of the partial F statistic revealed that all interaction effects, as well as the main effect for age, were non-significant at a $P < .05$ level. A two-factor model

including sex and salience was then tested. This simplified model revealed an $R^2 = .19$ and an F statistic of 36.05, significant at a $P = .0001$ level.

Examination of the correlation matrices of salience and values revealed that salience shared 17.6% of the variance in risk. Males in this study rated this value higher than did the females in this study. Based on the above analyses, it was concluded that risk was a function of salience and sex for subjects in this study.

TABLE 4-17 SOCIAL INTERACTION (V15)
MODEL SIMPLIFICATION P VALUES

V15	Overall	1st
Age	.6321	
Sex	.2025	
RV15	.0001	.0001
Age*RV15	.2568	
RV15*Sex	.6655	
Age*Sex	.7628	
Age*Sex*RV15	.4043	
F/R ²	10.50/.197	76.25/.197

The relationship between the dependent variable, social interaction (V15), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .197. The test of significance for the overall model resulted in a computed F statistic of 11.04, significant at the $P = .0001$ level. The relationship between social interaction and age, sex, salience, and their interactions was therefore statistically significant.

Examination of the partial F statistic revealed that all interaction effects as well as the main effects for age and sex were non-significant at a $P < .05$ level. A single-factor model including only salience was then tested. This simplified model revealed an R^2 of .197 and an F statistic of 76.25, significant at a $P = .0001$ level.

The correlation matrix of salience and values revealed that salience explained 19% of the variance in social interaction. Based on the above analyses, it was concluded that social interaction was a function of salience and was unrelated to age or sex in this study.

TABLE 4-18 SOCIAL RELATIONS (V16)
MODEL SIMPLIFICATION P VALUES

V16	Overall	1st
Age	.0144	.0357
Sex	.4666	
RV16	.0001	.0001
Age*RV16	.0627	
RV16*Sex	.7974	
Age*Sex	.5479	
Age*Sex*RV16	.2335	
F/R ²	9.8/.188	31.39/.17

The relationship between the dependent variable, social relations (V16), and the independent variables of age, sex, salience, and their interactions was then examined. The overall model resulted in an R^2 statistic = .19 meaning that 19% of the variance in social relations was shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 9.8, significant at

the $P = .0001$ level. Thus, the relationship between social relations and age, sex, salience, and their interactions was statistically significant.

Examination of the partial F statistic revealed that all interaction effects as well as the main effects of sex were non-significant at a $P < .05$ level. A two-factor model including age and salience was then tested. This simplified model revealed an $R^2 = .17$ and an F statistic of 31.39, significant at a $P = .0001$ level. The partial F statistic both age and salience remained significant at this point. Younger individuals rated this value higher than did older individuals in this study. Based on the above analyses, it was concluded that 16% of the variance in social relations was a function of salience.

TABLE 4-19 VARIETY (V17)
MODEL SIMPLIFICATION P VALUES

V17	Overall	1st
Age	.6095	
Sex	.0092	
RV17	.0001	.0001
Age*RV17	.9069	
RV17*Sex	.2033	
Age*Sex	.2893	
Age*Sex*RV17	.8120	
F/R ²	8.76/.168	29.32/.16

The relationship between the dependent variable, variety (V17), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic = .168 and an overall model computed F statistic of 8.76, significant at the $P =$

.0001 level. The relationship between variety and age, sex, salience, and their interactions was thus statistically significant.

Examination of the partial F statistic revealed that the interaction effects as well as the main effect for age were non-significant at a $P < .05$ level. A two-factor model including sex and salience was then tested. This simplified model revealed an R^2 of .16 and an F statistic of 29.32, significant at a $P = .0001$ level.

Examination of correlation matrices for the relationship between salience and values (See Table 4-1) revealed that salience contributed 14% to the the variance in variety for subjects in this study. Females rated this value higher than did males. Based on the above analyses, it was concluded that variety was a function of sex and salience for subjects in this study.

TABLE 4-20 WORKING CONDITIONS (V18)
MODEL SIMPLIFICATION P VALUES

V18	Overall	1st
Age	.9851	
Sex	.0091	.0121
RV18	.0001	.0001
Age*RV18	.0998	
RV18*Sex	.5246	
Age*Sex	.4906	
Age*Sex*RV18	.5071	
F/R ²	11.26/.21	37.48/.199

The relationship between the dependent variable, working conditions (V18), and the independent variables of age, sex, salience, and their interactions was then examined.

The overall model resulted in an R^2 statistic = .21, meaning that 21% of the variance in working conditions is shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 11.26, significant at the $P = .0001$ level. Thus, the relationship between working conditions and age, sex, salience, and their interactions is statistically significant.

Examination of the partial F statistic revealed that the interaction effects as well as the main effect for age were non-significant at a $P < .05$ level. A two-factor model including sex and salience was then tested. This simplified model revealed an R^2 of .199 and an F statistic of 37.48 significant at a $P = .0001$ level.

Examination of the correlation matrices of the relationship between salience and value choice (See Table 4-1) revealed that salience shared 18.4% of the variation in working conditions. Females rated this value higher than did males in this study. Based on the above analyses it was concluded that working conditions is a function of salience and sex as measured by subjects in this current study.

TABLE 4-21 CULTURAL IDENTITY (V19)
MODEL SIMPLIFICATION P VALUES

V19	Overall	1st
Age	.0725	
Sex	.1398	
RV19	.0001	.0001
Age*RV19	.6697	
RV19*Sex	.8145	
Age*Sex	.8487	
Age*Sex*RV19	.2858	
F/R ²	10.83/.20	74.45/.19

The relationship between the dependent variable, cultural identity (V19), and the independent variables of age, sex salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .20, implying that 20% of the variance in cultural identity is shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 10.83, significant at the $P = .0001$ level. Thus, the relationship between cultural identity and age, sex, salience, and their interactions was statistically significant in this study.

Examination of the partial F statistic revealed that all interaction effects as well as the main effects for age and sex were non-significant at a $P < .05$ level. A single-factor model including only salience was then tested. This simplified model revealed an R^2 of .19 and an F statistic of 74.45 significant at a $P = .0001$ level.

The correlation matrix of the relationship between salience and value choice (See Table 4-1) revealed that 19% of the variance in cultural identity is shared by salience.

Based on the above analyses it is concluded that cultural identity is a function of salience for this study.

TABLE 4-22 PHYSICAL PROWESS (V20)
MODEL SIMPLIFICATION P VALUES

V20	Overall	1st		2nd
		Male	Female	Male
Age	.8392	.0202	.1373	.0209
Sex	.0142			
RV20	.0001	.0002	.0001	.0003
Age*RV20	.1543	.1243	.0353	
RV20*Sex	.8844			
Age*Sex	.0033			
Age*Sex*RV20	.0308			
F/R ²	10.09/.19	7.46/.17	14.12/.18	9.86/.15

The relationship between the dependent variable, physical prowess (V20), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic of .19, and a computed F statistic of 10.09, significant at the $P = .0001$ level. The relationship between physical prowess and age, sex, salience, and their interactions was thus statistically significant.

Examination of the partial F statistic revealed that the two-way interactions (age*salience and salience*sex) were non-significant at a $P < .05$ level. Since a three-way interaction of age*salience*sex was significant, a simplified model was developed which sorted sex into female and male classes for further investigation. A three-factor model including age, salience, and the interaction of age*salience was developed for males and for females.

For females, the resultant model revealed an R^2 of .18 and an F statistic of 14.12 at a $P = .0001$ level. Examination of the partial F statistics showed that the main effect of salience and the interaction of age*salience remained significant. Interpretation was then restricted to plotting the regression equation in order to better understand the nature of the interaction effect of age*salience for females concerning physical prowess.

$$V20 = 8.49 - .158X_{age} - .012X_{RV20} + .012X_{age} * X_{RV20}$$

$$V20 = 8.49 - .158(20) - .012(1) + .012(20)(1) = 5.558$$

$$= 8.49 - .158(20) - .012(4) + .012(20)(4) = 6.29$$

$$= 8.49 - .158(50) - .012(1) + .012(50)(1) = 1.178$$

$$= 8.49 - .158(50) - .012(4) + .012(50)(4) = 2.99$$

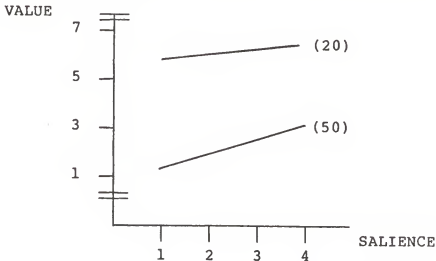


Figure 4-5 PLOT OF REGRESSION LINES RELATING SALIENCE TO VALUES FOR 20 AND 50 YEAR OLD FEMALE STUDENTS

Based on the above analyses, it was concluded that physical prowess for females was a function of the interaction of age and salience. Younger females in this study consistently rated higher than did older females regardless of the level of salience. The difference between females in

this study with high salience (3.3) was less than the difference at a low salience score (4.38).

For males, the resultant model revealed an R^2 of .17 and an F statistic of 7.46 at a $P = .0001$ level. The interaction of age*salience was no longer significant. A two-factor model including the partial F statistics for age and salience was then tested for males. This simplified model produced an R^2 of .15 and an F statistic of 9.86, significant at a $P = .0001$ level. Examination of the correlation matrix of salience and values (See Table 4-1) showed that salience shared 13% and age shared 2% of the variance in physical prowess. Younger males scored higher than did older males. Based on the above analyses it was concluded that physical prowess for males in this study was a function of age and salience.

TABLE 4-23 ECONOMIC SECURITY (V21)
MODEL SIMPLIFICATION P VALUES

V21	Overall	1st
Age	.0028	.0004
Sex	.3601	
RV21	.0001	.6977
Age*RV21	.0021	.0012
RV21*Sex	.1308	
Age*Sex	.1399	
Age*Sex*RV21	.9486	
F/R ²	14.01/.246	31.08/.23

Finally, the relationship between the dependent variable, economic security (V21), and the independent variables of age, sex, salience, and their interactions was examined. The overall model resulted in an R^2 statistic = .246 which

can be interpreted to mean that 24% of the variance in economic security is shared by the main effects and the interaction effects of the independent variables. The test of significance for the overall model resulted in a computed F statistic of 14.01, significant at the $P = .0001$ level. Thus, the relationship between economic security and age, sex, salience, and their interactions is statistically significant.

Examination of the partial F statistic revealed that the three-way interaction (age*sex*salience), the two-way interactions (salience*sex and age*sex), as well as the main effect for sex were all non-significant at a $P < .05$ level. A three-factor model including age, salience, and the interaction of age*salience was then tested. This simplified model revealed an $R^2 = .23$ and an F statistic of 31.08, significant at a $P = .0001$ level.

Interpretation was then restricted to the plotting of the regression equation in order to understand the nature of the interaction effect. Two levels of age were arbitrarily chosen (age 20 and age 50), as were two levels of salience (one and four) for the development of the regression equations.

$$V21 = 19.2 - .35X_{age} - .059X_{RV21} + .02X_{age} * X_{RV21}$$

$$\begin{aligned} V27 &= 19.2 - .35(20) - .059(1) + .02(20)(1) = 12.541 \\ &= 19.2 - .35(20) - .059(4) + .02(20)(4) = 13.564 \\ &= 19.2 - .35(50) - .059(1) + .02(50)(1) = 2.641 \\ &= 19.2 - .35(50) - .059(4) + .02(50)(4) = 5.464 \end{aligned}$$

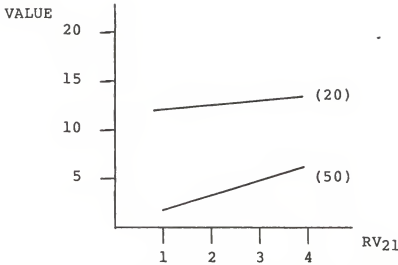


Figure 4-6 PLOT OF THE REGRESSION LINES RELATING SALIENCE TO VALUE CHOICE FOR 20 AND 50 YEAR OLD STUDENTS

Based on the above analyses it was concluded that economic security was a function of the interaction of age and salience. The difference between individuals with low measures of salience (9.9) is greater than the difference between individuals with high levels of salience (8.1). Younger individuals in this study consistently rated this value higher than did older individuals regardless of the level of salience.

Summary and Discussion of the Overall Hypothesis Tested

A discussion of the model simplification process and statements of conclusion regarding the significant independent variables which affect value choice was presented above. A summary of significant relationships ($P < .05$) between each value and each of the independent variables is listed in Table 4-24. Below, each hypothesis, as stated in Chapter III, is examined and findings discussed.

TABLE 4-24 SIGNIFICANT VALUES ACROSS ALL VARIABLES

Values	Age	Sex	Salience	Age*Salience	Sex*Salience	Age*Sex	Age*Sex*Salience	F	R ²
1 Ability Utilization	.0094		.0001					30.85	.16
2 Achievement			.0001	.0354				23.16	.18
3 Advancement			.0001					76.68	.19
4 Aesthetics			.0001			.0242		22.79	.23
5 Altruism	.0181	.0009	.0001					19.62	.16
6 Authority			.0001					63.69	.17
7 Autonomy		.0205	.0001	.0076				12.13	.14
8 Creativity	.0254		.0001					9.02	.17
9 Economic Reward	.0053		.0001					7.95	.15
10 Lifestyle			.0001	.0214				26.47	.20
11 Personal Development			.0001					66.71	.18
12 Physical Activity		.0016	.0001					53.42	.26

TABLE 4-24--Continued

Values	Age	Sex	Saliency	Age*Saliency	Sex*Saliency	Age*Sex	Age*Sex*Saliency	F	R ²
13 Prestige			.0001					75.89	.19
14 Risk		.0103	.0001					36.05	.19
15 Social Interaction			.0001					76.25	.20
16 Social Relations			.0001					59.65	.16
17 Variety		.0098	.0001					29.32	.16
18 Working Conditions		.0121	.0001					37.48	.20
19 Cultural Identity			.0001					74.45	.19
20 Physical Prowess	M .0209 F		.0003 .0001	.0001				9.86 14.12	.15 .18
21 Economic Security	.0171		.0001	.0012				31.08	.23

Hypothesis one - No relationship will exist between age and the 21 value choices of community college students when controlling for sex and salience.

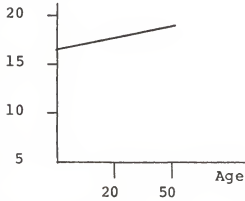
This null hypothesis was rejected for the following values: ability utilization, altruism, creativity, economic reward, economic security, and social relations. Each of these values was found to have significant partial F statistics ($P < .05$) for age. Figure 4-7 summarizes the graphic representations of the zero order relationships between age and those values found to be significant. In Chapter I the writer introduced two main ideas that should be examined in determining the significance of this finding. The first stated that older, non-traditional students in our colleges and universities today have expressed a need for career counseling which, for the most part, has its foundation in value choice as part of the career decision making process. Therefore, attention to how value choices differ as a function of age differences was needed. The second premise evolved from past research studies on the effect of age on value choice. These have, for the most part, revealed that older groups tend to rate extrinsic values higher, while younger groups tend to rate extrinsic values higher (Morse, 1978; Dietrich, 1977; Lehman, 1968; Drummond et al., 1978; and Glogowski and Lanning, 1968).

In examining value choice differences as a function of age, this researcher noted that six significant relationships were revealed found the main effects of age and value choice. As age increased, the value scores for ability utilization, altruism, and creativity increased,

V1 Ability Utilization

$$V1 = 16.14 + .045(50) = 18.39$$

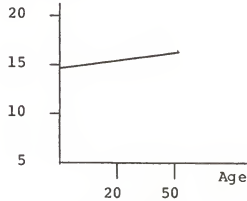
$$P = .0153$$



V5 Altruism

$$V5 = 14.25 + .047(50) = 16.60$$

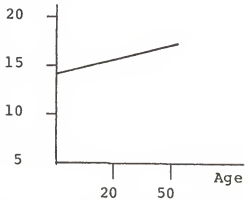
$$P = .0412$$



V8 Creativity

$$V8 = 13.937 + .05(50) = 16.44$$

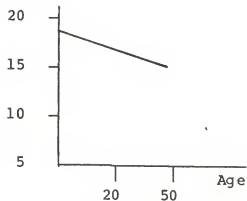
$$P = .0307$$



V9 Economic Reward

$$V9 = 18.17 - .059(50) = 15.22$$

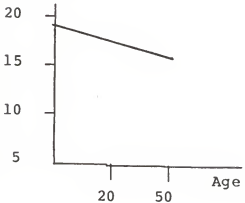
$$P = .0105$$



V21 Economic Security

$$V21 = 18.5 - .047(50) = 16.15$$

$$P = .0310$$



V16 Social Relations

$$V16 = 16.55 - .044(50) = 14.35$$

$$P = .0427$$

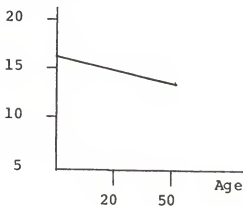


Figure 4-7

SIGNIFICANT RELATIONSHIPS BETWEEN AGE AND VALUE CHOICE

while scores for economic reward, economic security, and social relations decreased. Of the twenty-one values tested, 28 percent of the value choices revealed differences as a function of age based on the 330 subjects included in this study. It is this researcher's conclusion that six out of twenty-one value choices does not constitute a logically significant enough difference on which to base alterations in the counseling approaches or career development instruments to be used with students of different ages.

The second premise addresses the classification of intrinsic and extrinsic values. Below is a list of

Intrinsic

Extrinsic

- | | |
|--------------------------|------------------------|
| 1. ability utilization | 3. advancement |
| 2. achievement | 9. economic reward |
| 4. aesthetics | 10. lifestyle |
| 5. altruism | 13. prestige |
| 6. authority | 14. risk |
| 7. autonomy | 15. social interaction |
| 8. creativity | 16. social relations |
| 11. personal development | 17. variety |
| 12. physical activity | 18. working conditions |
| 20. physical prowess | 19. cultural identity |
| | 21. economic security |

intrinsic and extrinsic variables as defined by Super (1980c, p.4). Super (1980c, p.3) stated that in classifying intrinsic-extrinsic scales, it is unimportant to distinguish "between intrinsic and extrinsic values, except for item

writing and scale purification processes". Examination of this researcher's results, however, confirmed that where a significant relationship between age and value choice existed, older groups chose intrinsic values (ability utilization, altruism, creativity) while younger groups chose extrinsic values (economic rewards, economic security, social relations). Although the relationship between the classification of intrinsic and extrinsic value choices and age was not a focus of this study, it appears to be highly relevant and worthy of further investigation.

Hypothesis two - No relationship will exist between sex and the twenty-one value choices of community college students when controlling for age and salience.

Results showed that males in this study rated autonomy, physical activity, and risk significantly higher than females. Females rated working conditions, altruism, and variety significantly higher than males. These results are similar to findings reported earlier in Chapter II concerning the relationship between value choice and sex (Kaufman and Fетters, 1980; Gribbons and Lohnes, 1968; and Thompson, 1966) which found that the similarities between sexes were greater than the differences between sexes.

Perhaps a most important implication of this result for counselors who work with males and females in value exploration is that the two sexes need not be treated differently. Studies such as those listed above, as well as this one, are increasingly finding fewer differences in the values, motivations, needs, and goals of female and male students and

workers. Studies of the relationship between sex and value choice should be sensitive to the many social, cultural, and economic factors which may affect this relationship. Researchers should take into account the age of the subjects, the setting in which they are tested, and the attitudes toward work that the subjects hold, to better understand the effect that sex may have on value choices.

Hypothesis three - No relationship will exist between salience and the twenty-one value choices of community college students when controlling for age and sex.

A measure of salience as determined by the combined scores of the "Role Values Grid" of the Salience Inventory (Super, 1980c) was found to be significantly related to each value choice. The "Role Values Grid" measured salience in terms of the degree to which individuals sought each value in each of their roles as student, worker, community member, home and family, and leisurite. The "Role Values Grid" instructed subjects to rate these roles in terms of "how much opportunity you see to find each value in each type of activity" (See Appendix B). This may be viewed as a behavioral measure as opposed to an idealistic measure from the Value Scale (See Appendix A) which instructs subjects to rate each value in terms of how "it is now or will in the future be important to me".

The correlation matrix of the zero order relationships of values and role salience displayed in Table 4-1 revealed the variance in each value explained by salience. The mean variance in values as a function of salience was R^2 of .165,

while the range in variance was from a low of R^2 of .095 to a high of R^2 of .234. The across the board rejection of this hypothesis, as well as the stated high levels of variance, indicates that a behavioral measure of value realization was an important predictor of value choice for subjects in this study. Past studies have shown salience to be positively correlated to measures of self-esteem (Korman, 1966); measures of occupational congruence (Greenhaus, 1971; 1973); measures of job involvement (Lawler and Hall, 1970); and measure of work value satisfaction (Super 1980b). This investigation additionally showed salience to be positively correlated with value choice. Implications of this finding are discussed later in Chapter V.

Hypothesis four - No relationship will exist between the interaction of role salience and age and the twenty-one value choices of community college students.

The null hypothesis was rejected for achievement, autonomy, lifestyle, physical prowess for females, and economic security. The following descriptions of this interaction with these values was as follows: younger individuals in this study consistently rated values higher than older individuals across all levels of salience; value scores increased for both groups across salience showing a positive relationship between value choice and salience; the difference between value scores of the two groups decreased as salience increased; and finally the slope or rate of change was greater for the older group than for the younger group.

In Chapter I the issue of whether the multiple roles assumed to be played by adults would increase the salience score was addressed, the measure of relative importance of value satisfaction sought in each role, for older individuals. Results of this study examining the effect of the interaction of age and salience on value choice failed to show an increased salience score or value score for older individuals. A possible explanation for this may be that the Value Scale purports to measure an idealistic choice of values that one finds now or hopes to find in the future to be important. The "Role Values Grid" asked the more behavioral question of what opportunity the individual saw to find each value in the various roles he or she plays. The tests should therefore have measured values in two different ways. Since younger people scored higher on salience than older people, either their lifestyles afford them greater opportunities to find value satisfaction in a great variety of roles than older people, or the salience of values as measured by the "Role Values Grid" was not differentiated from an idealistic value score as measured by the Values Scale by younger individuals.

The greater slope of the line representing the positive linear relationship between value choice and salience for older individuals in this study is another effect of interest. Perhaps these findings imply that adults who have experience in this variety of roles may have found that minimal value satisfaction is actually derived from these

values, thereby rating the values at a lower salience level. A previous study by Seltz and Collier (1977) found that adults make decisions in the context of multiple role responsibilities. It is easy to assume that as one grows older, role responsibilities will increase. However, perhaps role diversity is changing in today's society. This study did not control for role experience. Future research on the effect of the interaction of salience and age on value choice controlling for role experience would need to be conducted before further objective analysis of this relationship could be made.

Hypothesis six - No relationship will exist between the interaction of age and sex for the twenty-one value choices of community college students.

This null hypothesis was rejected for aesthetics, which females in this study rated higher than males when compared at the same age, but older groups rated this value higher regardless of their sex. It was interesting that aesthetics was the only value in which older groups rated higher than younger groups. The rate of increase in the correlation of age and values was greater for males than females. Therefore, as individuals aged, they gained a greater appreciation of aesthetics. This applied especially to males who rated this value much lower than females at a young age, but higher than females at an older age. Since only a single value is significantly affected by an age sex interaction, it is difficult to make a definitive statement about the

effect of this interaction or value choice. Interpretation was therefore quite limited.

Hypothesis seven - No relationship will exist between the interaction of age, sex, and salience and the twenty-one value choices of community college students.

This three-way interaction had a significant relationship with physical prowess. Analysis was then continued separately for males and females, and an interaction of age by salience remained significant for females only. Both the older and younger women in this study rated this value relatively low compared to the scores of the other values measured. The rate of increase in value score across salience for older women was much greater than for younger women. Gilbert, Manning, and Ponder (1980) attributed value choice differences based on sex to the influence of traditional sex role socialization. Yet, studies such as those done by Kaufman and Fetters (1980) showed that when age and occupational level was controlled for, sex differences were diminished. Perhaps the graph shown earlier in this chapter (Figure 4-5) for physical prowess of younger and older women reflects both of the findings. Older women in this study were perhaps more products of traditional sex role socialization which would assume that women would not rate the value of physical prowess very high. The younger women in this study rated this value higher, confirming less traditional ideas about sex role stereotyping by age, and yet an overall low value across age for females remained.

CHAPTER V
SUMMARY, CONCLUSIONS, AND IMPLICATIONS
FOR FUTURE RESEARCH

The main focus of this study was an exploratory data analysis of the contributions that age, sex, salience, and their interactions make toward predicting value choice in career decision making among community college students. In order to measure value choices, the Value Scale (See Appendix A) was administered to 330 community college students. A measure of role salience was derived from the "Role Values Grid" (See Appendix B) which was administered to each of the subjects in this study as well. The Values Scale directed respondents to rate each value in terms of how "it is now or will in the future be important to me . . .". Directions on the "Role Values Grid" were to rate each role in terms of "how much opportunity is seen to find each value in each type of activity. . .". Subjects of all ages and both sexes were included in this study. Value choice as a function of age, sex, and salience was examined using regression analyses, which revealed significant relationships between the dependent variables and each of the independent variables.

Conclusions

General conclusions of this study are as follows:

1. Based on this study, this researcher determined that the effect of age on value choice was not significant enough to warrant alteration in counseling techniques or instruments based on value choice for use with students of different ages. Only six of twenty-one values choices were found to be significantly related to age for subjects in this study. A possible explanation may be found in examining the demographic data of the sample (See Table 3-2). This showed that almost 66% of the sample was age 22 or younger and 90% were under age 30. Although the age range itself was great (age 16 to age 81) the huge percentage under age 30 may have contributed to the lack of significance found in value choice as a function of age.
2. Value orientation categorized by Super (1980a), as (1) intrinsic or (2) extrinsic was found to be significantly related to age in this study. Intrinsic values are those satisfactions derived from performing an activity itself such as work. Extrinsic values are those satisfactions derived as a result of the activity such as the outcome of work. In examining the values which were shown to be significantly related to age, this study found that older subjects chose intrinsic values whereas younger subjects chose extrinsic values. The small number of values significantly related to age in this study limits further

analysis of the examination of the relationship of intrinsic/extrinsic value orientations and age. However, this relationship warrants further investigation.

3. Only six values were found to be significantly affected by sex for subjects in this study. This researcher suggested that as age, educational level, work attitudes, as well as other social, economic, and psychological factors are controlled for, differences in value choice as a function of sex will decrease. Because several of these factors were not included for examination in this study, analysis of this relationship is quite limited.

4. A significant relationship between a measure of role salience and value choice was found for each of the twenty-one values measured in this study. This implies that values which are highly rated are those which are incorporated into one's lifestyle through life roles which one plays. The findings of this study indicated that for those subjects tested, younger students had a higher level of salience than older students. Previous research cited earlier in Chapter II, however, indicated that older people are involved in more roles and should, therefore, have higher levels of value satisfaction through various roles. The contradictions between the results presented here and theoretical evidence listed earlier requires further investigation.

There may be several possible explanations for this contradiction. Perhaps younger individuals failed to differentiate between an idealistic value choice offered in

the Value Scale, and the more behavioral rating of value satisfactions derived from role experiences. It is also possible that older individuals were more realistic in rating the actual value satisfactions derived from various roles on the basis of actual experience. A third explanation is that younger people may be more involved in a multitude of roles than older individuals are.

It may be concluded that a positive relationship does exist between measures of role salience and value choice. The nature of this relationship as it interacts with age requires further investigation. Future research on the contribution of a measure of salience to value choice should consider the actual role experience of individuals as a control variable in determining the significance of the salience measure. It would be important to know how an individual's actual role experience compares with the rating of value realization within roles as measured by the Salience Inventory, and how age affects this relationship.

Implications for Future Research

In view of the findings of this study the following implications for future research are suggested:

1. Researchers have found that value choices change with age (Morse, 1978, Alvi 1981, Dietrich 1977). The findings of this study supported the premise that older people tended to rate intrinsic rather than extrinsic values more highly. Age alone was shown to be an inadequate variable in further

understanding of this tendency toward intrinsic value choice. The findings of this study imply that future research studies on the relationship between age and value choice should include relevant variables distinguishing age groups.

2. The findings of this study on the relationship of sex to value choice support previous research studies cited in this chapter which show that there is less difference between sexes than within the same sex in terms of value choice. Social, economic, cultural, and educational factors among others, should be controlled for when examining the relationship of sex to any variable. Perhaps then the more accurate value of the sex variable itself be measured. Until then counselors should continue to avoid any forms of sex stereotyping which may introduce false distinctions between males and females.

3. Salience is still a relatively new construct with a variety of definitions in the literature (Greenhaus, 1971, 1973; Lawler and Hall, 1970; Super, 1980b). As used in this study, salience was a measure of the relative importance of a role in supplying an outlet for value satisfaction. Salience was shown to be highly correlated with each of the twenty-one values tested. Perhaps the more interesting finding of this study was that younger people rated both values and salience higher than older individuals. This phenomenon requires further investigation before a definitive explanation for it could be offered. Counselors,

however, should be aware of this seeming tendency of younger people to perhaps overrate values, and older people to underrate values. Determining whether this is a function of a measure of idealism versus pragmatism or realism requires further investigation.

APPENDIX A VALUES SCALE

How important are the values listed below to you as a person? Please read each statement, and use the following scale to show how important that value is to you:

- 1 means Of Little Or No Importance
- 2 means Of Some Importance
- 3 means Important
- 4 means Very Important

Make a black mark filling in this circle with the number that shows how important that value, like this:

	1	2	3	4
have lots of fun	0	0	0	0

(Note that this inventory uses 4 rather than the 5 circles provided by the Answer Sheet.)

Now please answer all of the questions, using the Answer Sheet.

It is now or will in the future be important for me to ..

- 1.011 use all my skills and knowledge
- 2.021 have results which show that I have done well .
- 3.031 get ahead
- 4.041 make life more beautiful
- 5.051 help people with problems
- 6.061 tell others what to do
- 7.071 act on my own

Go on to next page

It is now or will in the future be important for me to

- 8.081 discover, develop, or design new things
- 9.091 have a high standard of living
- 10.101 live according to my own ideas
- 11.111 develop as a person
- 12.121 get a lot of exercise
- 13.131 be admired for my knowledge and skills
- 14.141 do risky things
- 15.151 do things with other people
- 16.161 be with friends
- 17.171 have every day be different in some way
from the one before
- 18.181 have good space and light in which to work . .
- 19.191 live where people of my religion and
race are accepted
- 20.201 work hard physically
- 21.211 be where employment is regular and secure . . .
- 22.012 do work that takes advantage of my abilities. .
- 23.022 know that my efforts will show
- 24.032 get ahead quickly in my career
- 25.042 find pleasure in the beauty of my work
- 26.052 be involved in work in which the goal
is helping people
- 27.062 be able to be a leader at work
- 28.072 make my own decisions at work
- 29.082 create something new in my work
- 30.092 have a good income

Go on to next page

It is now or will be in the future important for me to ..

- 31.102 live my life my way
- 32.112 have ideas about what to do with my life . . .
- 33.122 take part in sports and other physical
activities
- 34.132 be recognized for my accomplishments
- 35.142 feel that there is some risk or some
danger in the work I do
- 36.152 work in a group rather than by myself
- 37.162 do things with people I like
- 38.172 do a number of different things during
the day
- 39.182 have good sanitary facilities (e.g.
washroom) at work
- 40.192 work where people of my ethnic origin
have good job possibilities
- 41.202 use powerful machines
- 42.212 have a regular income
- 43.013 develop my abilities
- 44.023 reach a high standard in my work
- 45.033 be able to get promotions
- 46.043 be concerned with beauty in my work
- 47.053 work in a way that makes the world a
better place
- 48.063 be the one who manages things at work
- 49.073 be free to get on with a job in my own way . .
- 50.083 have a chance to try out new ideas at work . .
- 51.093 be well paid for whatever work I might do . . .
- 52.103 work at what I want to when I want to

Go on to next page

It is now or will be in the future important for me to ..

- 53.113 find personal satisfaction in my work
- 54.123 be physically active in my work
- 55.133 be held in high esteem because of my work . . .
- 56.143 take on dangerous tasks if they interest me . .
- 57.153 be with other people while I work
- 58.163 be able to talk with people I like while
I work
- 59.173 change work activities frequently
- 60.183 be protected from the weather while I work . .
- 61.193 feel accepted at work as a member of my
race or ethnic group
- 62.203 use my strength
- 63.213 have a secure position
- 64.014 keep on learning new things at work
- 65.024 do something at which I am really good
- 66.034 be able to think in terms of excellence
- 67.044 be able to add to the beauty of the world . . .
- 68.054 improve the welfare and peace of the world . .
- 69.064 make decisions that others follow
- 70.074 be my own boss
- 71.084 use new ideas and methods
- 72.094 earn enough to live well
- 73.104 decide what to do with my life
- 74.114 cultivate my inner life
- 75.124 make a real physical effort at work

Go on to next page

It is now or will be in the future important for me to ..

- 76.134 be viewed as a special person
- 77.144 face the challenge of danger
- 78.154 have people take time to chat
- 79.164 have a job where I can easily make friends . .
- 80.174 move around while doing things at work
- 81.184 work in a place where I can really do
my job
- 82.194 work with people of my own background
- 83.204 move big boxes and crates
- 84.214 have a feeling of economic security
- 85.015 have to think about what I am doing at work . .
- 86.025 get the feeling I have really achieved
something
- 87.035 work where getting ahead is considered
important
- 88.045 be appreciated for the beauty of my work . . .
- 89.055 do work which improves things for other
people
- 90.065 have the authority to get things done
- 91.075 set my own working hours
- 92.085 be inventive in my job
- 93.095 have all of the nice things I want
- 94.105 plan my own work activities
- 95.115 develop my own work life
- 96.125 be able to be outdoors a great deal
- 97.135 have people recognize the work I have done . .

Go on to next page

It is now or will be in the future important for me to ..

- 98.145 be able to run reasonable risks when
there is something to gain
- 99.155 deal with a variety of people at work
- 100.165 work where there are friendly people
- 101.175 be able to do my work in a variety of ways . .
- 102.185 have a comfortable temperature at work
- 103.195 be true to the values of my people
- 104.205 carry heavy loads
- 105.215 know that I can always make a living

End

APPENDIX B ROLE VALUES GRID

Directions: No two people want exactly the same things to the same degree, in the same activity. Here we ask you what values you seek or hope to find in each of the five types of activities: Studying, Working, Community Service, Home and Family, and Leisure or Free-Time. What you value may differ in importance with the activity. Using the same scale in which "1" on the separate answer sheet is low, "little or none," and "4" is high, "a great deal," show how much opportunity you see to find each value in each type of activity. Occasionally a value may not be applicable to a role. If this is so mark "5", "does not apply", on the answer sheet.

What opportunity do you see to ..

- | | |
|-----------------------------------|-------------------------|
| A. use all your skills and. . . . | 101. studying |
| knowledge in | 102. working. |
| | 103. community service. |
| | 104. home and family. . |
| | 105. leisure activities |
| B. know that your efforts | 106. studying |
| will show in | 107. working. |
| | 108. community service. |
| | 109. home and family. . |
| | 110. leisure activities |
| C. get ahead by | 111. studying |
| | 112. working. |
| | 113. community service. |
| | 114. home and family. . |
| | 115. leisure activities |

Go on to next page

- D. make life more 116. studying
 beautiful by 117. working.
 118. community service.
 119. home and family. .
 120. leisure activities
- E. help people with 121. studying
 problems in 122. working.
 123. community service.
 124. home and family. .
 125. leisure activities
- F. tell others what to do in . . 126. studying
 127. working.
 128. community.
 129. home and family. .
 130. leisure activities
- G. act on your own in 131. studying
 132. working.
 133. community.
 134. home and family. .
 135. leisure activities
- H. discover or make new 136. studying
 things in 137. working.
 138. community service.
 139. home and family. .
 140. leisure activities
- I. have a high standard 141. studying
 of living through 142. working.
 143. community service.
 144. home and family. .
 145. leisure activities
- J. live your life your way in . . 146. studying
 147. working.
 148. community service.
 149. home and family. .
 150. leisure activities
- K. develop as a person in 151. studying
 152. working.
 153. community service.
 154. home and family. .
 155. leisure activities
- L. be physically active in 156. studying
 157. working.
 158. community service.
 159. home and family. .
 160. leisure activities

Go on to next page

- M. be admired for your161. studying
knowledge in162. working.
163. community service.
164. home and family. .
165. leisure activities
- N. feel that you can take166. studying
some risks in167. working.
168. community service.
169. home and family. .
170. leisure activities
- O. do things with other171. studying
people in172. working.
173. community.
174. home and family. .
175. leisure activities
- P. be with people you like in . . .176. studying
177. working.
178. community service.
179. home and family. .
180. leisure activities
- Q. do a number of different181. studying
things in182. working.
183. community service.
184. home and family. .
185. leisure activities
- R. have good conditions for186. studying
187. working.
188. community service.
189. home and family. .
190. leisure activities
- S. be where people of your.191. studying
religion and race are192. working.
accepted in193. community service.
194. home and family. .
195. leisure activities
- T. use your strength in196. studying
197. working.
198. community service.
199. home and family. .
200. leisure activities
- U. have a secure future201. studying
through202. working.
203. community service.
204. home and family. .
205. leisure activities

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BIOGRAPHICAL SKETCH

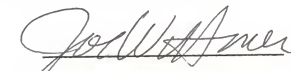
Jayne Richmond was born and raised in beautiful New Hampshire until her senior year of high school when she moved to Florida. After completing high school she went to the University of Florida where she received the Bachelor of Arts degree in English literature.

Immediately following graduation she entered the counselor education program where she received a Specialist in Education degree, focusing on counseling in higher education. Several graduate assistantships over those two years afforded her the opportunity to teach courses in counseling, student personnel work and social problems, as well as supervise other students and work in student personnel administration.

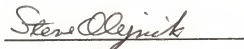
She began study of the Doctor of Philosophy degree in counselor education following graduation. Her area of specialization has been student personnel administration in higher education.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


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A handwritten signature in dark ink, appearing to read 'Gary Seiler', is written over a horizontal line.

Gary Seiler
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This dissertation was submitted to the Graduate Faculty of the Department of Counselor Education in the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1982

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